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ABSTRACT

The three teaching units in this packet are designed to help children ages 8 to 11 enjoy, utilize, and safely ride bicycles by mastering skills and knowledge pertaining to their bicycles, their driving ability, and the traffic system. Unit I is concerned with the bicycle and its parts, various kinds of bicycles, and proper size and maintenance. Unit II involves traffic signs, traffic safety, and driver's signals. Unit III is built around a demonstration of the child's ability to stop, balance at a slow speed, maneuver, ride in a traffic pattern, and react quickly on a bicycle. Each unit contains complete lesson plans; material lists; and masters for visuals, class hand-outs, and quizzes. Answer sheets are included. The packet also includes full color replicas of 24 actual road signs and a copy of "Safe Cycling for Bikers of All Ages", a publication put out by the Kansas Department of Transportation. (SP)

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A New Dimension in 4-H Programs
for 8-11 Year Olds

Bicycle Education

Designed into Three Teaching Units

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4-H Bicycle Education

A New Dimension in 4-H Program for 8-11 year olds

Three Teaching Units by
William H. Borst
Northeast Area Extension
Specialist, 4-H and Youth

To Agent and Youth Leader:

This packet of three teaching units on bicycle education is designed to help boys and girls enjoy, utilize and be safe with bicycles. The students need to master skills and knowledge of their own bicycle, the traffic system, and their own driving ability.

Before beginning these lessons, discuss what will be learned with the youngsters. Depending upon their age, give each the appropriate "Get Ready, Get Set, Drive." Ask each to fill out the form and bring it back at the first session.

The packet provides you with a more detailed list of bicycle parts to help in these lessons.

RESOURCES LIST

Unit I: The Bicycle

- Provided in this packet

  Masters for acetates of five bicycle types, one for measuring frame sizes, and one of a table of sizes.
  Master for making "Bicycle Check Sheet" for each student.
  Masters for making quiz cards for each student: 8-9 year olds and 10-11 year olds.

- You will need to obtain

  A bicycle dealer or mechanic to teach part or all of this session.
  Overhead projector.
  Screen.
  At least one bicycle for demonstration.
  Sewing or carpenter tape measures.

Unit II: The Traffic System

- Provided in this packet

  Master for acetate of nine shapes of road signs.
  A Lyons & Carnahan poster of road signs.
  Request form and film information.
  Safe Cycling from Kansas Department of Transportation.
  Master to make copies of "Biker's Dozen" for students.
  Masters to make quiz cards for students.

- You will need to obtain

  A local traffic official may be enlisted to teach part or all of this session.
  Overhead projector.
  A film from Kansas Department of Education.
  16 mm projector.
  Screen.

Unit III: The Driver

- Provided in this packet

  Charts of five range layouts.
  Masters to make range score sheets for each student.
  Masters to make quiz cards for students.

- You will need to obtain

  Volunteers such as civic organizations, public officials may be enlisted to conduct or assist with this session.
  103 6" cones or sand filled milk cartons.
  100' tape measure.
  Yellow chalk.
  Bicycles that may be loaned to youngsters to use on the ranges.
  Two stop watches.

CREDITS

Material for these units has been drawn from a number of sources. In particular, credit is given to:

- Kansas State Department of Education, Gerald M. Christensen, Director of School Traffic Safety.
- Kansas Department of Transportation Safety Department.
- Lyons and Carnahan, Education Division, Meredith Corporation.
- Washington State Patrol and Superintendent of Public Instruction.
- The National Safety Council.

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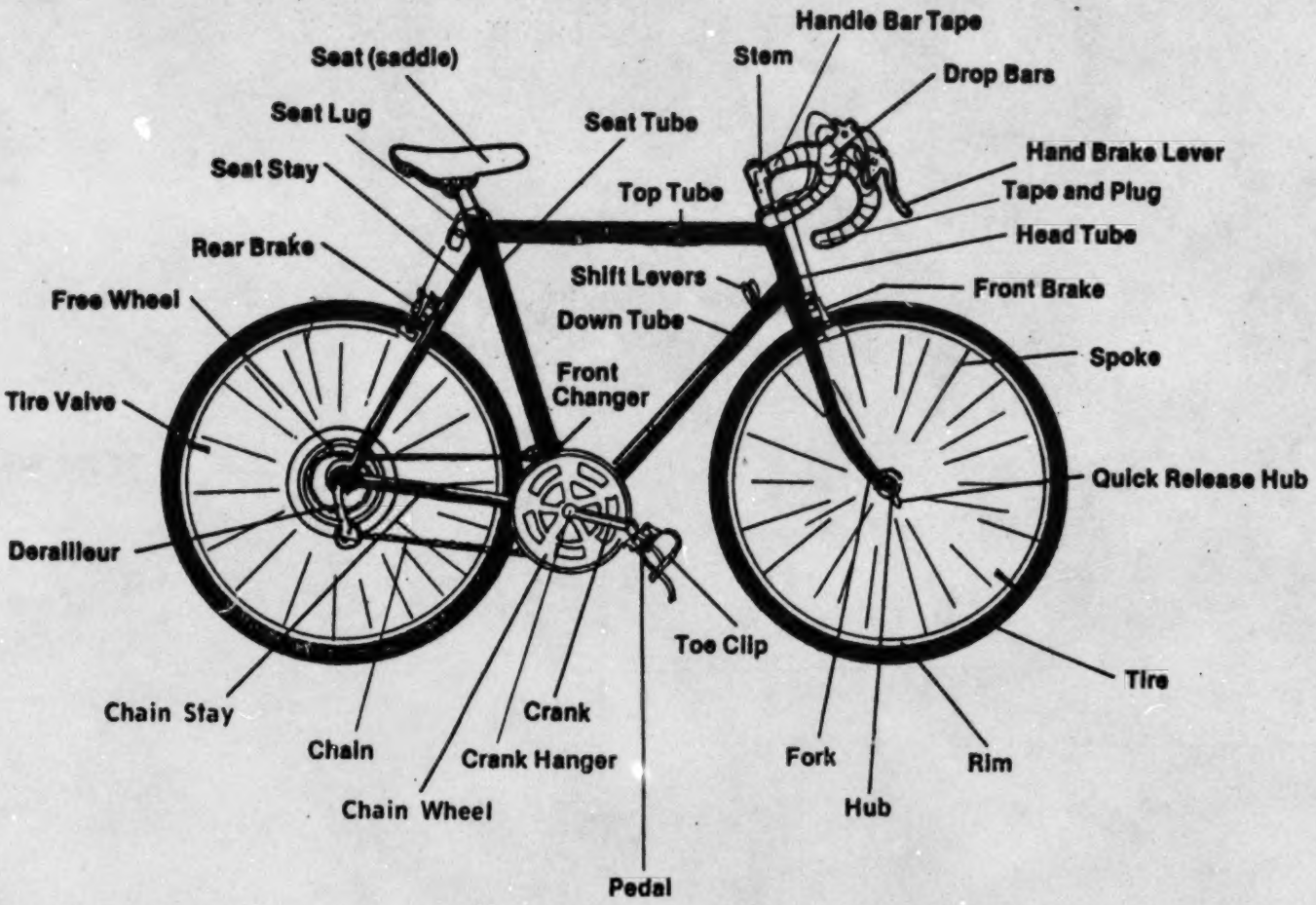

Handle Bar Tape
Seat (saddle)
Stem
Drop Bars
Seat Lug
Seat Tube
Hand Brake Lever
Seat Stay
Top Tube
Tape and Plug
Rear Brake
Head Tube
Shift Levers
Front Brake
Free Wheel
Down Tube
Spoke
Front
Changer
Tire Valve
Quick Release Hub
Derailleur
Toe Clip
Tire
Chain Stay
Crank
Chain
Crank Hanger
Fork
Rim
Chain Wheel
Hub
Pedal

GET READY, GET SET, DRIVE

1. Draw a line from the bicycle part name to its picture.

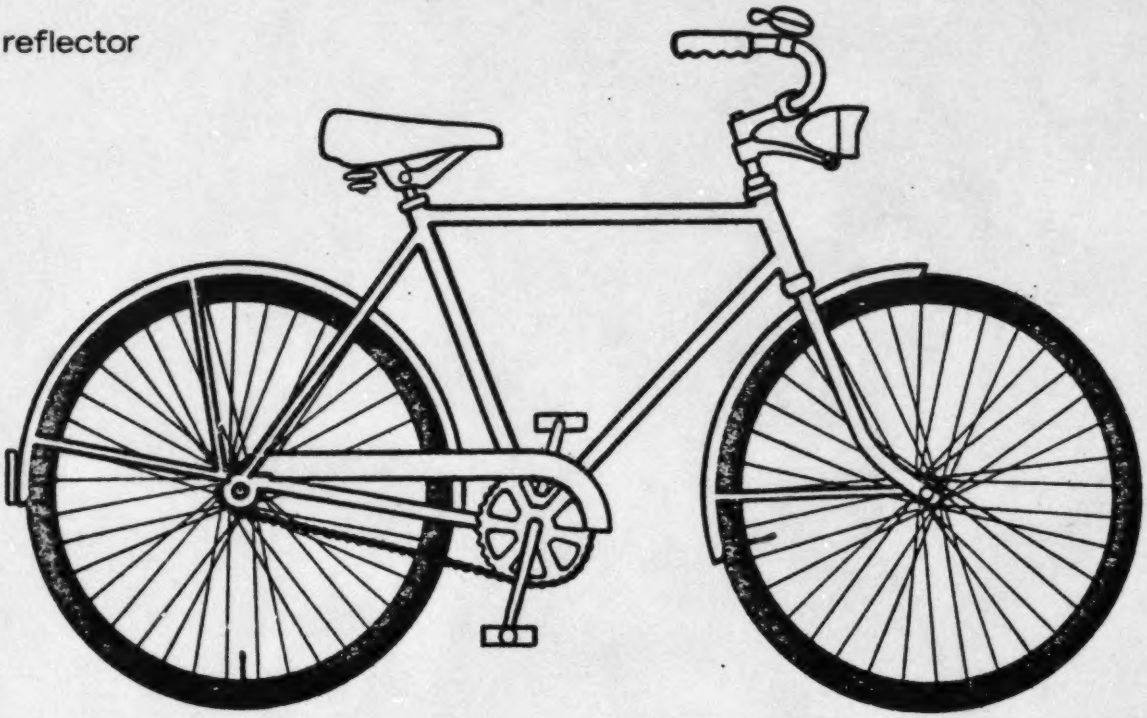
bell

seat

handlebars

light

reflector



pedals

chain

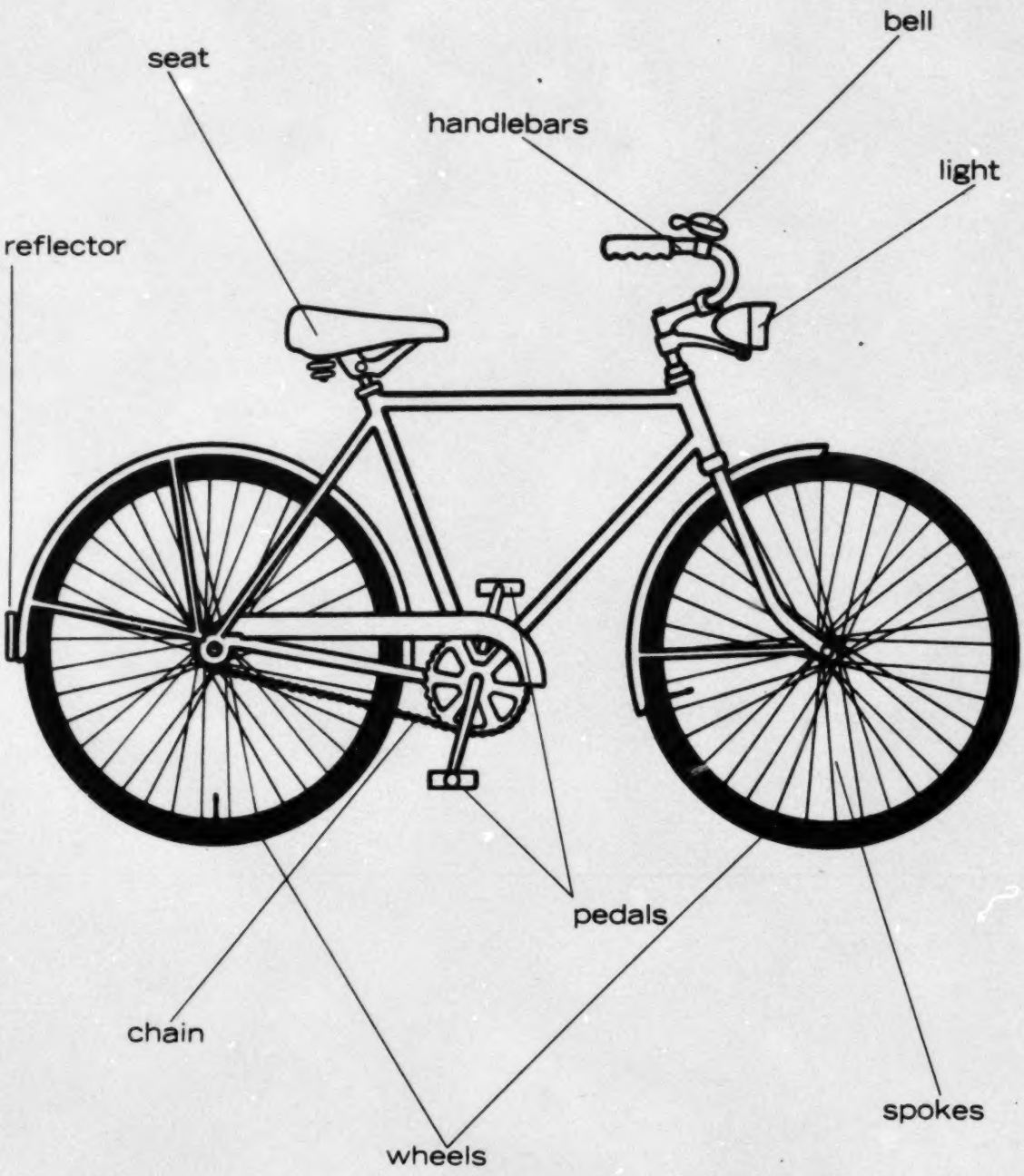
spokes

wheels

Bring this sheet with you to our first bicycle meeting.

GET READY, GET SET, DRIVE

1. Draw a line from the bicycle part name to its picture.

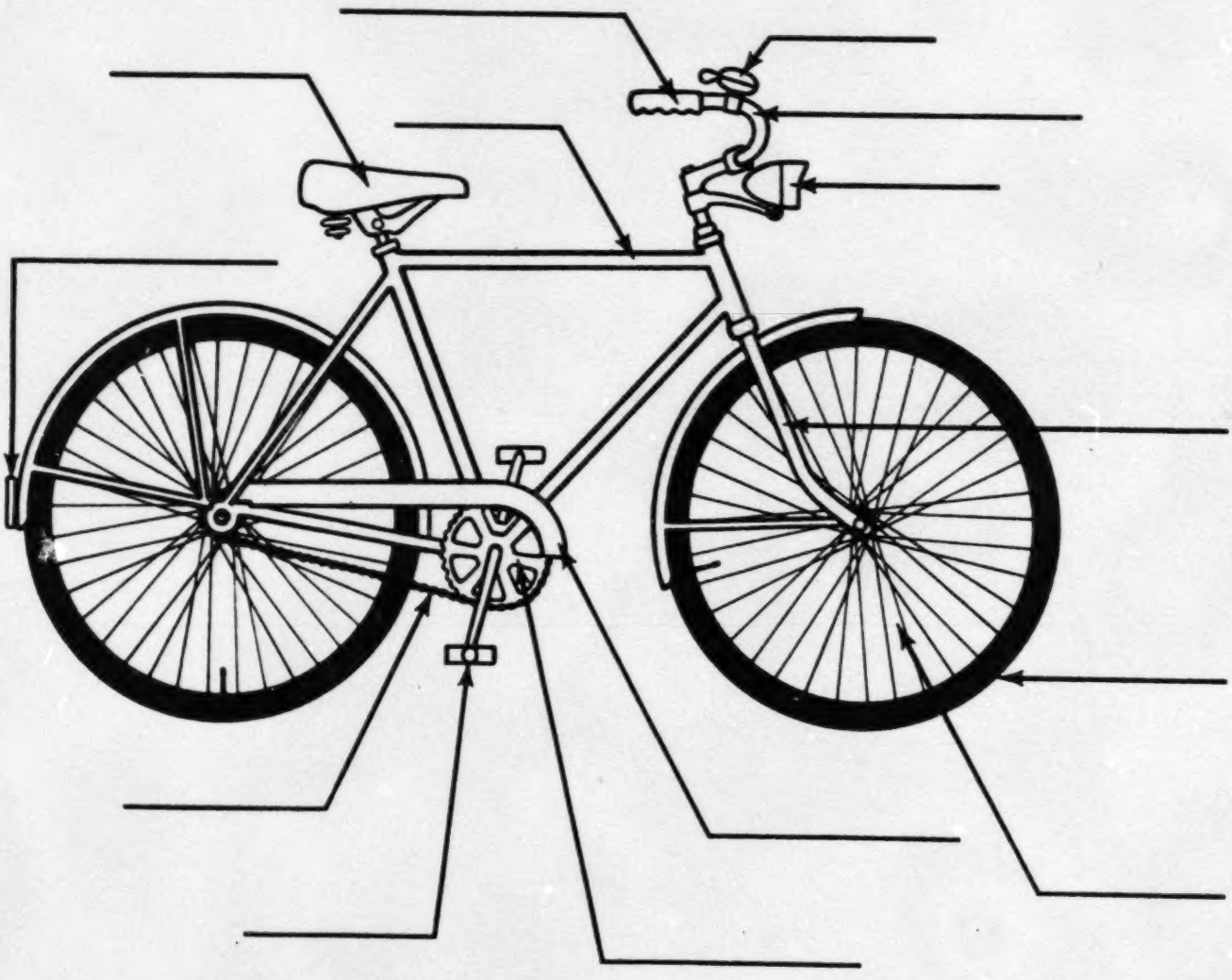


For 8 and 9 year olds.

GET READY, GET SET, DRIVE

1. Write the name of each bicycle part on the line that points to it:

reflector	chain	light	handlebars
handlegrip	pedal	spokes	bell
saddle	sprocket	fork	chain guard
frame	tire		

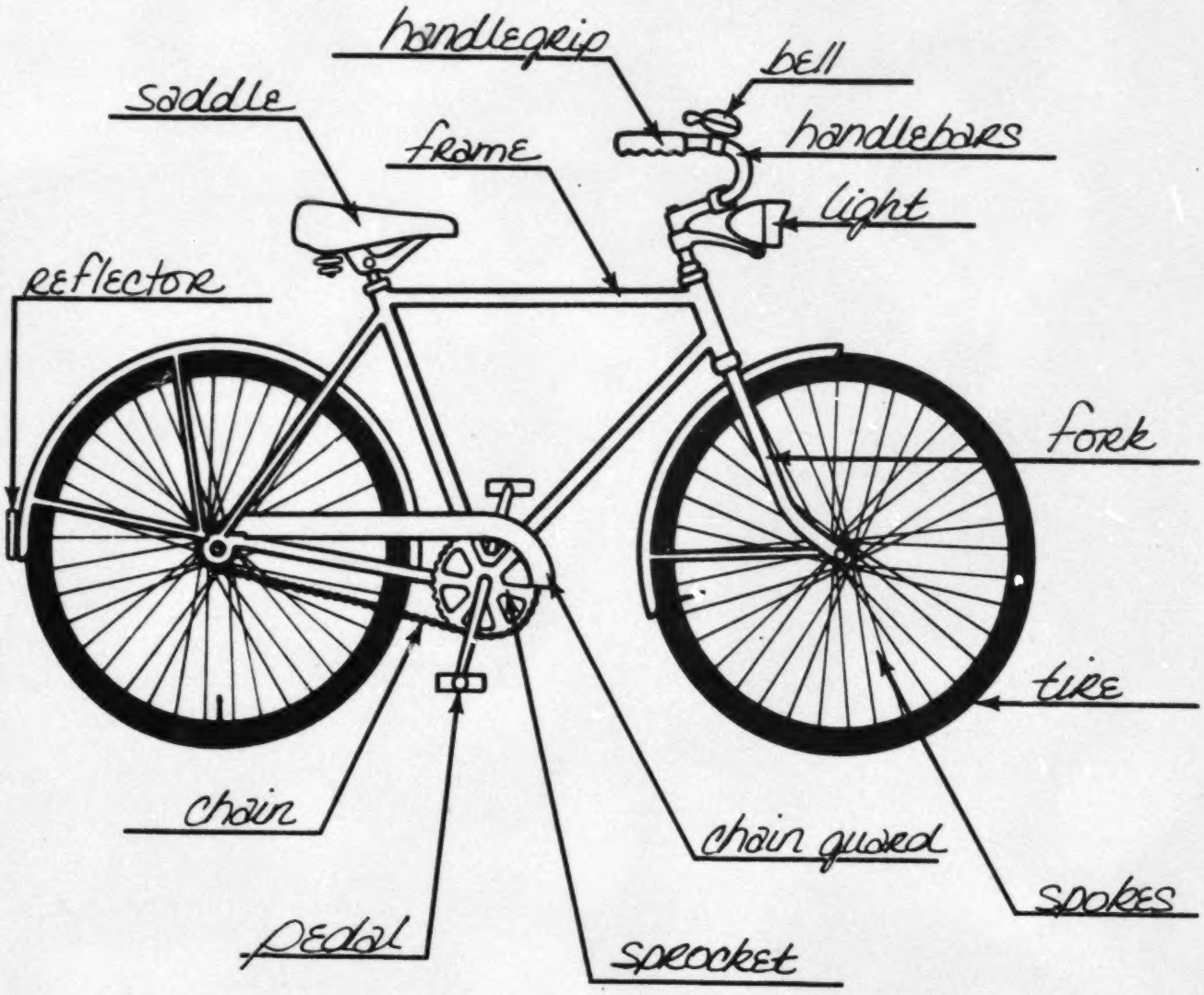


Bring this sheet with you to our first bicycle meeting.

GET READY, GET SET, DRIVE

1. Write the name of each bicycle part on the line that points to it:

reflector	chain	light	handlebars
handlegrip	pedal	spokes	bell
saddle	sprocket	fork	chain guard
frame	tire		



For 10 and 11 year olds.

Unit I

The Bicycle

Students will know the relationship of bicycle driving safety and satisfaction to correct size, type and maintenance of their bicycles.

4-H Bicycle Education

A New Dimension in 4-H Program for 8-11 year olds

Three Teaching Units by
William H. Borst
Northeast Area Extension
Specialist, 4-H and Youth

LESSON PLAN

I. Reasons people drive bicycles: Ask students to list on chalk board or flip chart the reasons people drive bicycles. They ought to fall into the following catagories. You may add those reasons not suggested by students.

A. Pleasure.
1. Joy of being in fresh air and getting exercise.
2. Chance to be outdoors and enjoy nature.
3. Able to go places without a motor.
4. Racing.
5. Touring--going long distances.

B. Physical fitness.
1. Builds muscles.
2. Develops a nice figure and build, and helps with weight control.
3. Keeps heart in good condition.
4. Keeps blood and other systems moving.
5. Gives good appetite and sleep.

C. Saves gasoline, oil, and electricity.

D. No polluting of the air of the space around.

E. A good way to go places.
1. School and work.
2. Shopping and errands.
3. To be with friends.

II. Bicycle selection: Students will know reasons for thoughtful selection of the best type of bicycle for their individual needs including how to measure for correct size.

A. Types.
1. Middle-weight: Strong, long lasting, weight about 50 pounds, large low-pressure tires, coaster brakes. Best for young beginners.

RESOURCES NEEDED

- Models of different types of bicycles or visuals.

2. High-rise: For fun, not for beginners, short wheel base, small wheels, high handlebars, long seat. For quick turns, trick moves.

3. Adult tricycle: Will not fall over, can carry things in the big basket.

4. Tandem: Built for two drivers, has features of middle-weight, for adults.

5. Light-weight: For speed, easy handling, long drives, narrow high pressure tires, dropped or touring handlebars. Three, five, ten and more speeds, easier climbing hills and facing winds, and more speed in all conditions.

B. Size: Ask one or two youngsters to demonstrate.

1. Straddle the top tube. Student should be able to stand flat footed on the floor with one inch clearance of their crotch over the top tube.
   - Bicycle for demonstration.

2. When seated with the heel on low pedal, there should be a straight line through hip, knee and heel.

3. Students can measure their inseam from crotch to heel to learn which bicycle frame size is best for each one. The frame size should be nine to ten inches shorter than the inseam measurement. Frame size is measured by the distance between the seat lug and center of the crank hanger.
   - Sewing or carpenter measuring tapes.
   - Acetate of this measurement.

4. Table of sizes discussion.
   - Acetate of table of sizes.
   a. Wheel size is printed on the sidewall of tires and is measured in inches.
   b. Boys and girls are different in sizes. even when they are the same age their legs are different lengths.
   c. Bicycles are different, too. Even when they have the same wheel size, the frames are of different sizes.
   d. Each bicycle needs to fit each driver. Bicycles can be changed by raising and lowering the seat.
   e. But, if the bicycle is just too big and the seat cannot be lowered enough, or the top tube is too high to straddle, then it is dangerous to drive.

III. Maintenance: The student will recognize if features of his bicycle are in good condition so that he will know when repairs are necessary.

A. Review with students the correct answers to the "Get Ready, Get Set, Drive" quiz on parts of the bicycle.

B. Give each youngster a "Bicycle Check Sheet." Ask students to work in pairs to inspect their bicycles point-by-point as the teacher demonstrates on a model bicycle. If students do not have bicycles, have each take turns inspecting one or more points on the model bicycle.

1. Size: The driver must safely straddle the top tube, feet flat on the floor with an inch clearance between crotch and tube. The driver must be able to sit on the seat with a heel on the low pedal with the leg straight from hip to heel. The other foot should be supporting the driver and bicycle in an upright position.
2. Frame: No breaks, cracks or bent tubes.
3. Handlebars: Unbent, level with the frame, a little higher than the seat, stem tight, but not so tight that it will not give in case of an accident.
   a. Top of drop bar even with nose of seat, taped and plugged.
   b. Touring bars have undamaged grips tightly in place.
4. Wheels: Straight, complete set of undamaged spokes, each tight so that when turning the wheel a pencil may be held lightly against the spokes and they will "ping." If spokes are loose they will produce a low-sounding "plunk."
5. Tires: Tread is visible, sidewalls are not worn or with breaks. Tires should be inflated to the pressure printed on the sidewall when checked with a gage. Or the driver can apply the "pinch" test: if the tire gives to the pinch, it needs more pressure.
6. Brakes: Driver must be able to skid tires on dry pavement when told to stop at a moderate rate of speed. There should be no play in coaster brakes. Levers and cables of hand brakes should be unworn and tight.
7. Pedals: No damage, no side play, spin freely.
8. Seat: Tight, right height for the driver, level with the ground. New drivers should be able to put both feet flat on the ground when sitting on the seat.
9. Chain guard or pant clips: Chain guards should be firmly in place so that neither chain nor any part of the crank or chain wheel are rubbing on it. Drivers of bicycles without chain guards should wear clips, elastic bands,

- "Bicycle Check Sheet"
- Students' bicycles or a bicycle provided by the instructor

strings or other devices around the cuffs of long pants to keep the pants from becoming caught in the chain.

10. Safe keeping of the bicycle:
    a. Lock: Bicycles should have a heavy duty chain or cable and lock. The chain or cable should be long enough to loop through the rear wheel, frame and a solid object such as a post or small tree.
    b. Serial number and registration tag: Many communities require registration tags to be attached to the bicycle. This should be current. Each maker of bicycles stamps a serial number, usually in one of three places:
        - o On the seat stay (rear fork) near the axle.
        - o Under the crank housing.
        - o Near the top of the seat tube.
11. Lights and reflectors: Front head lamp with white light that works and can be seen at least a city block away, a rear red reflector that can be seen for a city block, side reflectors (yellow on front and red on back) that may be seen a block away.
12. Warning bell or horn: If the bicycle has one of these, it should be tight and working.

IV. Quiz: Students will know and be able to repeat ideas given to them in this lesson on either the quiz card for 8 and 9 year olds or that for 10 and 11 year olds. All will answer correctly at least 80% of the questions.

Complete this quiz in order to
A. Review what was covered in this session.

B. Help to improve teaching of these important lessons.

- 8 and 9 year old or 10 & 11 year old quiz cards

TEACHERS KEY TO QUIZ

8 and 9 year old		10 and 11 year old	
1. T	6. T	1. T	6. a
2. T	7. F	2. T	7. c
3. F	8. F	3. T	8. b
4. F	9. F	4. F	9. c
5. T	10. F	5. F	10. c

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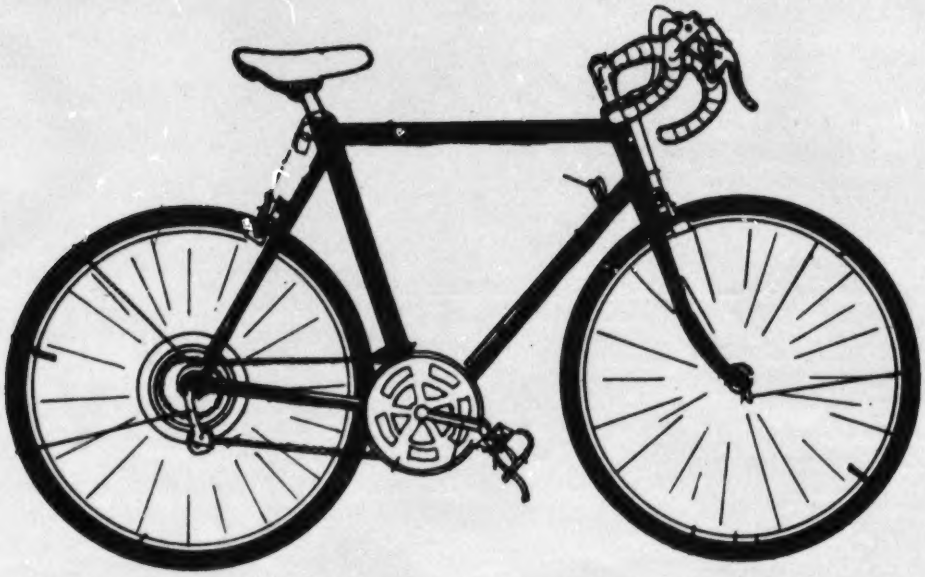

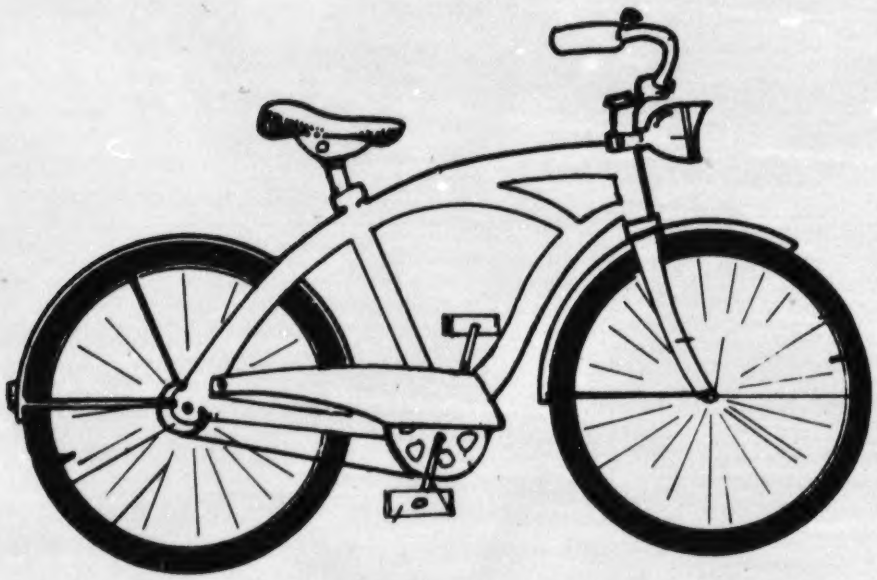

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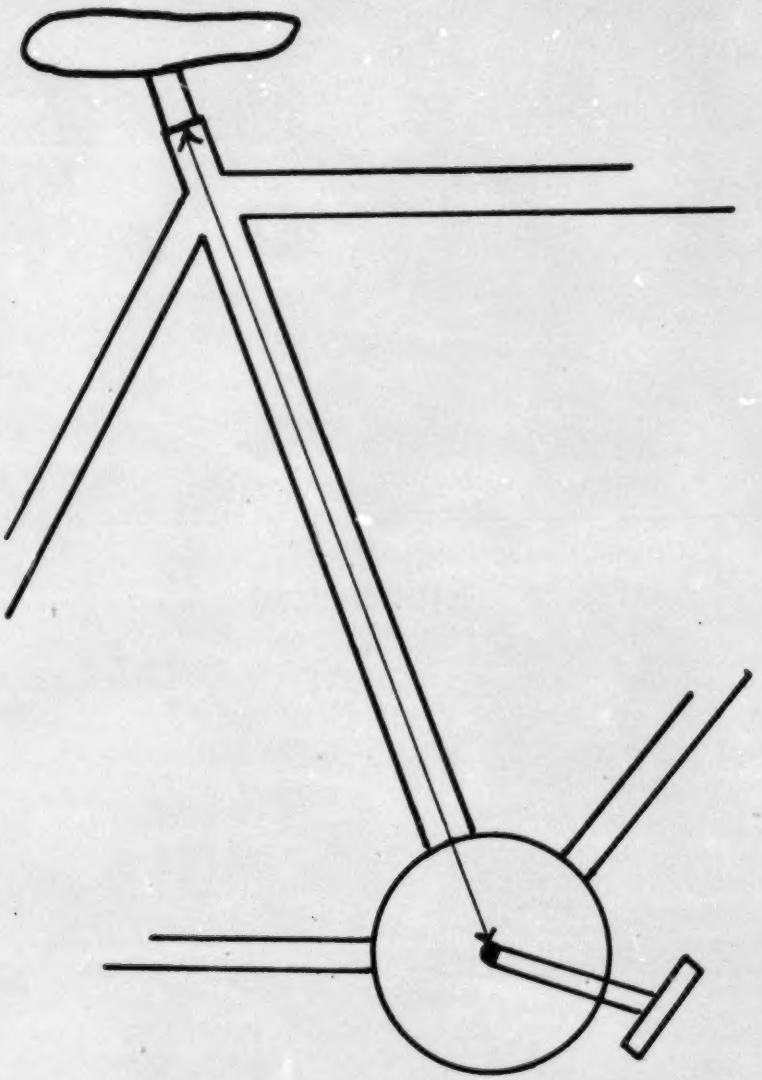
Measuring Bike Frame Size



Acetate

SIZE OF BICYCLE FOR AVERAGE CHILD

Wheel Size	Age	Frame (inches)	Leg Length (inches)
16 - 20	5 - 7	13	22
24 - 26	8 and older		26 and up
		19	30 - 31
		21	33
		23	34
27		19	31 1/2
		21	32 1/2
		22	33 1/2
		23	34 1/2
		24	35 1/2
		25	36 1/2

BICYCLE CHECK SHEET

Name _____ Group/Class _____

Bicycle serial number _____ Registration tag number _____

Date _____

CHECK POINTS	O.K.	Not Safe
Size		
• Driver can straddle the top tube and sit on the seat with heel on low pedal and leg straight	____	____
Frame		
• Free of breaks, cracks and bends	____	____
Handlebars		
• A little higher than the seat, unbent	____	____
• At right angle to front wheel, unbent	____	____
• Drop bars' top even with nose of seat	____	____
• Drop bars taped and plugged	____	____
• Touring bars have undamaged and tight grips	____	____
Wheels		
• Straight	____	____
• No missing spokes	____	____
• Each spoke tight	____	____
Tires		
• Tread can be seen	____	____
• Sidewalls not worn, without breaks	____	____
• Tire inflated	____	____
Brakes		
• Driver can skid tires on dry pavement	____	____
• No play in coaster brakes	____	____
• Levers and cables of hand brakes tight and unworn	____	____
Pedals		
• No damage, no side play	____	____
• Spin freely	____	____

	O.K.	Not Safe
Seat		
• Level with ground, tight	____	____
• Right height for driver (see "size"), new driver should have both feet flat on the ground when seated	____	____
Chain guard		
• Tight; not rubbing chain, chain wheel or crank	____	____
Pant clips		
• If bicycle does not have chain guard and driver is wearing long pants the driver should also wear a pant clip, string, elastic band around right pant cuff.	____	____
Lock		
• Heavy duty lock and chain or cable long enough to loop through rear wheel, frame and solid object	____	____
Serial and registration (tag) numbers		
• Bicycle registration number should be recorded at top of this check sheet	____	____
• Registration or tag number where required by city should also be recorded at top of this sheet	____	____
Lights and Reflectors		
• Front lamp works and can be seen a block away	____	____
• Rear reflector can be seen a block away	____	____
• Yellow-side-front reflector can be seen a block away	____	____
• Red-side-rear reflector can be seen a block away	____	____
• Pedal reflectors are in place	____	____
• BICYCLE APPROVED FOR NIGHT DRIVING	____	____
Warning bell or horn		
• It works	____	____
Other parts _____	____	____

Comments _____

_____

20

8 and 9 year olds' quiz Score _____

THE BICYCLE

Name _____ Grade _____ Age ____

School, club or group _____

Circle the best answer.

T F 1. Many people drive bicycles for fun and physical fitness.

T F 2. Bicycle brakes should be able to stop the vehicle in a short distance on dry pavement.

T F 3. The size of the bicycle makes no difference if the driver is skilled.

T F 4. Bicycles are not called vehicles.

T F 5. To drive a bicycle at night in Kansas, one must have a headlight that works.

T F 6. Loose handlebars may be dangerous.

T F 7. A bicycle must have a bell or horn to drive on the street.

T F 8. Most tail reflectors on bicycles are yellow in color.

T F 9. Bicycles in safe condition mean they have a headlight and taillight only.

T F 10. A soft bicycle tire stops quicker than hard tires on wet pavement.

10 and 11 year olds' quiz

Score _____

THE BICYCLE

Name _____ Grade _____ Age _____

School, club or group _____

Circle the best answer.

T F 1. Bicycles are vehicles and subject to the same laws covering automobiles.

T F 2. Bicycle brakes, when applied firmly, should cause the rear wheel to skid on clean, dry pavement.

T F 3. Normally the tightening of loose spokes will straighten tires and rims that wobble.

T F 4. The size of a bicycle makes no difference if the driver is skilled.

T F 5. Soft bicycle tires have better traction than do properly inflated tires.

Select the best answer to complete the statement.

____ 6. A chain or cable should be used to lock the bicycle by the

a. rear wheel and frame.
b. rear wheel.
c. front wheel and frame.
d. none of these.

____ 7. A bicycle, when purchased properly, is measured by

a. frame size only.
b. wheel size only.
c. both frame and wheel size.
d. none of these.

____ 8. A bicycle headlight should be visible from at least

a. 100 feet away.
b. 500 feet away.
c. 1000 feet away.

____ 9. It is safe for two people to ride on a bicycle

a. sometimes.
b. if traffic is light.
c. only if it has two seats.
d. whenever the tires are properly inflated.

____ 10. The seat is at the proper height if while sitting on it

a. your leg is straight with foot on pedal.
b. your knee is even with the handlebars.
c. your leg is straight with the heel on the pedal at its lowest position.
d. none of these.

Unit II

The Traffic System

Students will understand that knowing the traffic system will help them and their friends become safe drivers of bicycles.

4-H Bicycle Education
A New Dimension in 4-H Program for 8-11 year olds

Three Teaching Units by
William H. Borst
Northeast Area Extension Specialist, 4-H and Youth

LESSON PLAN

I. Review of "The Bicycle" lesson.

A. Name reasons people drive bicycles.
B. Give the types of bicycles people drive.
C. Tell how a person knows if the bicycle is their size.
D. Tell how each part of the bicycle listed on the "Bicycle Check Sheet" looks when it is okay.

RESOURCES NEEDED

- Use visuals from "The Bicycle" lesson.

II. Signs of Life.

Students will know communication methods used in traffic safety. They will understand these to apply to pedestrians, auto, and all other forms of traffic especially bicycles and their drivers.

A. Identification of Signs.

1. Colors.

a.	Red	Stop; forbidden
b.	Green	Go
c.	Black and white . .	Rules
d.	Yellow	Warning
e.	Blue	Where to get help
f.	Orange	Road building or fixing
g.	Brown	Places to have fun

- Lyons and Carnahan poster.

2. Shapes.

Point to the various shapes of road signs on the acetate. Ask children what each means.

- Acetate of nine shapes of road signs.

a.	Octagon (eight sides)	Stop
b.	Horizontal rectangle . .	Directions to places
c.	Vertical rectangle . . .	Information for drivers
d.	Diamond . . . . . (resting on point)	Warning: tells what to look for

e. Pentagon (five sides, looks like house). . . . . School crossing

f. Square with red circle and bar . . . . . No: figure in circle will tell what is not allowed

g. Pennant (triangle on side). . . . . No passing

h. Triangle (equalateral: point is down) . . . . . Yield: let the other person go first

i. Round . . . . . Railroad warning

3. Signals.

a. Lights: Colors mean the same as they do on signs.

- Red . . . . . Stop until light changes
- Red, flashing . . Stop. Then go if it is safe
- Yellow . . . . . Warning: light will soon turn red. It is against the law to be in the intersection when the light turns red
- Yellow, flashing . . . . Go slow, be very careful
- Green . . . . . Go. But let walkers and other vehicles go first

b. Lights for pedestrians. Sometimes bicycle drivers become pedestrians and walk their bicycles.

- "Walk" green . . Leave curb to cross street
- "Don't Walk" flashing . . . . If still on curb, don't begin to cross
- "Don't Walk" red. . . . . Do not leave curb

c. Pavement markings.

- There are white and yellow lines marked on many streets and highways. These tell car drivers where to drive, about passing and turning. Bicycle drivers always drive on the right side of the street or road. If there are more than two bicycles, they should be in single file. It is against the law to drive more than two side-by-side.

- Bicycle lanes. Bicycle drivers should use those streets and lanes marked for bicycles and stay off other streets not marked for bicycles. There are three kinds of bicycle lanes to look for:

  1. Signs only. These are streets especially marked by signs (green with picture of bicycle). Keep to right. Watch for people getting out of parked cars. Yield to walkers and other vehicles.

  2. Marked lanes and signs. These are on streets and have signs as we discussed, but they also have white lines marked on the street. Bicycles should drive inside the lane, cars should not.

  3. Special paths. These are special driveways like sidewalks that are made just for bicycles. Cars are not to be on these paths.

d. Driver's signals.

- Left turn: Left arm stuck straight out from the body. Do this a half block before starting the turn. But when making the turn have both hands on the handle bars. The signal tells people the driver is going to turn left. They can see when he is turning. Cars and motorcycles have light signals used the same as arm signals.

- Right turn: Left arm held upward from the body at a 45° angle. Do this a half block before starting the turn.

- Stop or slow: Left arm held downward and at a 45° angle from the body.

III. Local and state laws for bicycles. Students will know that there are special laws relating to bicycle drivers in addition to those for walkers and cars.

- Local or state traffic officials ought to be asked to teach this. They may be asked to teach any or all of the session.

A. Give each youngster a copy of "Biker's Dozen" adapted from "Safe Cycling for Bikers of All Ages" of the Safety Department of Kansas Department of Transportation. Discuss each of the 12 rules and reasons bicycle drivers should obey them.

- "Biker's Dozen"
- "Safe Cycling"

IV. Film. There are a number of good films on bicycles. The first four listed below were selected from the library of Kansas State Department of Education, 120 East 10th Street, Topeka, KS 66612. Use the "request form" to order film and follow the "Suggestions for Film Use."

- "Bicycle Film Request" form.

Before using a film, you will be most successful if you follow these suggestions:

1. Give students a preview of the film, asking them to watch for ideas covered in the unit.
2. Show the film.
3. Review and reinforce main points covered.

A. Just Like a Car. Film Loops, Inc., 15 minutes. Suitable for audiences of 8 to 11 year olds, 16 mm film, reel-to-reel videotape, video-cassette. Outstanding overview of safe driving techniques done in a refreshing manner. Topical coverage for all ages. Treats total bicycle driving in interesting and informative fashion. Designed for program content or review. Teacher's guide included.

B. Bicycling on the Safe Side. Ramsgate Films, 20 minutes, suitable for audiences of 10 and 11 year olds, 16 mm film. Excellent film on perceptive cycle skills for 10 and 11 and older. Should be considered for any curriculum program at the introduction of a program. One of the beter "instructional films."

C. Bike Talk. Sid Davis Productions, 15 minutes, 16 mm film. Outstanding approach to teach bicycle safety for 8 and 9 year olds. It outlines all the rules. Use with discretion with 10 and 11 year olds.

D. Bikes are Beautiful. McDonald's, 26 minutes, suitable for 8 and 9 year olds, 16 mm film. This film narrated by Bill Cosby provides students with an excellent view of bicycle safety rules. A test is included, on the film, to reinforce student learning. Teachers should be prepared for this. Should be used at beginning of program.

E. It's Your Move. The Travelers Insurance Company, 10 minutes, 16 mm film, suitable for 8 to 11 year olds. Puts the viewer behind the handlebars, presenting 10 potential bike/auto situations. Designed to make youngsters more aware of how to cope with traffic hazards. To borrow this film, contact the Travelers Film Library, One Tower Square, Hartford, CT 06115.

V. Quiz: Complete either the 8 and 9 year old or 10 and 11 year quiz card in order to--

1. Review what was covered in this session.
2. Help to improve teaching of these important lessons.

- 8 and 9 year old and 10 and 11 year old quiz cards

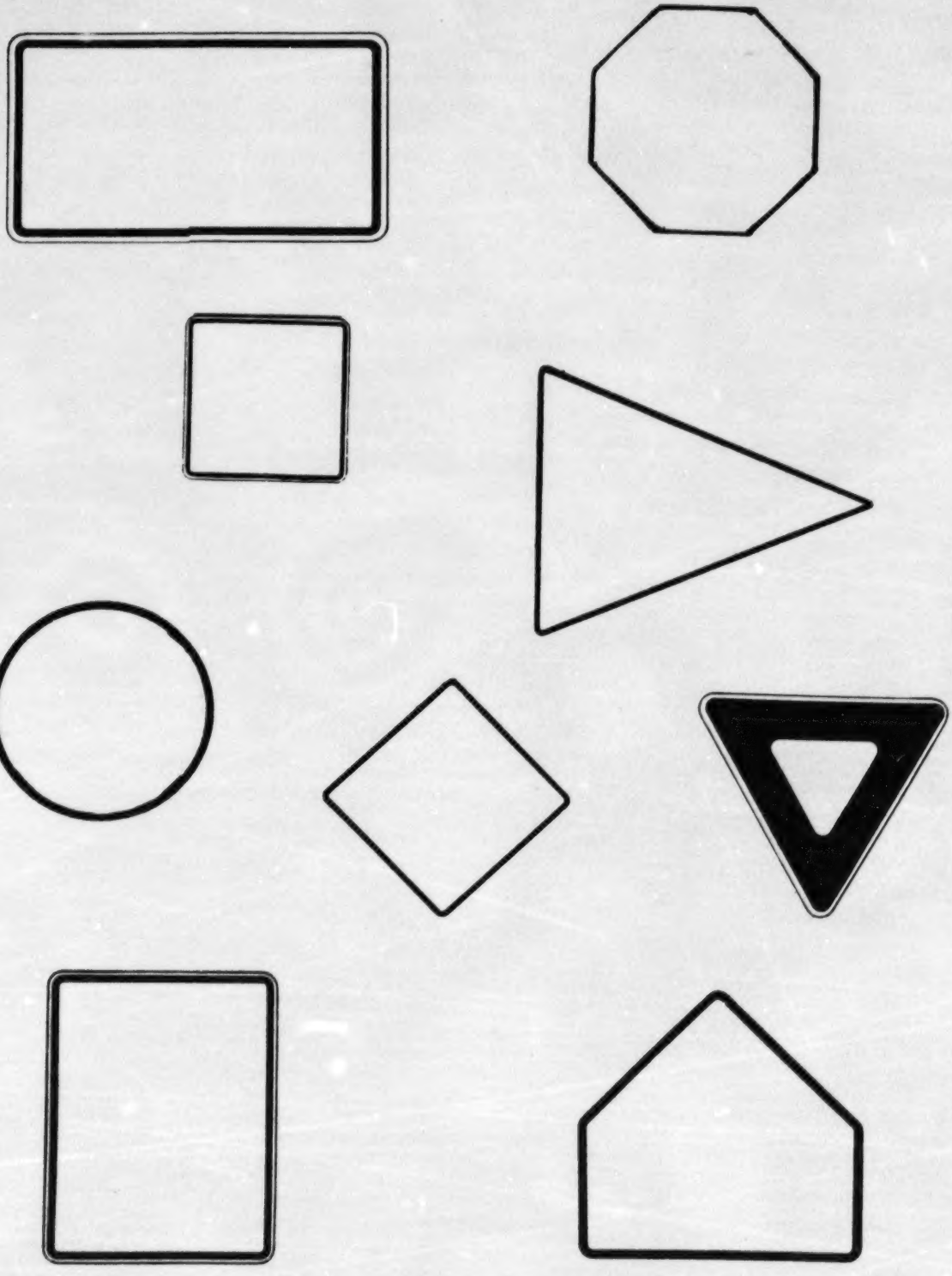
VI. The next lesson will deal with you, the driver. There will be five ranges set up where you can demonstrate your skill of bicycle driving:

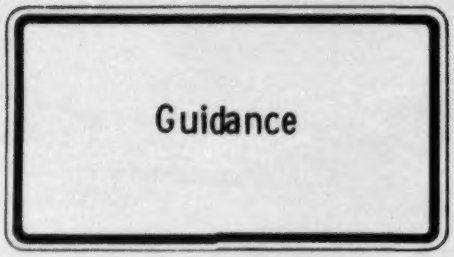
A. Balancing at slow speed.
B. Stopping ability.
C. Maneuvering.
D. Managing a traffic pattern.
E. Reaction time.

TEACHERS KEY TO QUIZ

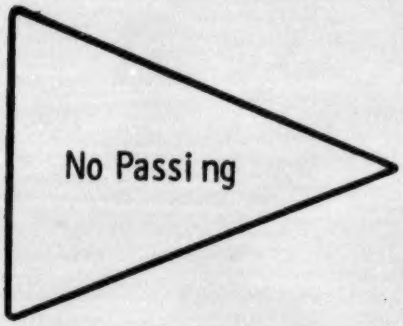
8 and 9 year old		10 and 11 year old	
1. T	6. F	1. F	6. a
2. F	7. F	2. F	7. b
3. T	8. T	3. F	8. c
4. T	9. T	4. T	9. c
5. F	10. F	5. F	10. b

All educational programs and materials are available without discrimination on the basis of race, color, national origin, sex, or handicap.




Guidance

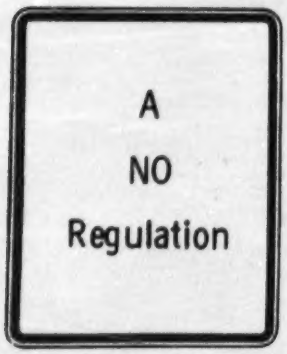
Stop

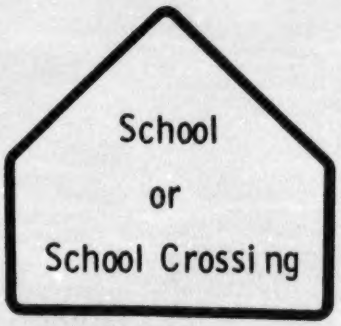

No Passing

Railroad
Crossing

Warning

Yield


A
NO
Regulation


School
or
School Crossing

BIKER'S DOZEN

- Keep to the right. Drive one bicycle behind the other.
- Obey all traffic signs and signals just the same as cars must do.
- Use hand signals to let others know that you plan to stop or turn.
- Give walkers the right of way. Never ride on sidewalks in shopping centers or downtown.
- Only one person on each bicycle, except tandem bicycles and bicycles equipped with a child's seat.
- Keep both hands on the handlebars except when signalling. Never be towed by another vehicle. Trick riding and games should not be done on the street.
- Stop before entering a street from a driveway or alley.
- Check before driving a bicycle to be sure that all parts are working well.
- Sit on a seat designed for the bicycle.
- Be careful and alert whenever driving a bicycle.
- Always drive in a steady, straight line. Check traffic and signal before making any turn or change of direction.
- Driving a bicycle at twilight or night is dangerous. So that others can see the bicycle, it should have a strong headlight and side and rear reflectors that can be seen for at least a city block.

Kansas State Department of Education

Kansas State Education Building
120 East 10th Street Topeka, Kansas 66612

Name and title _____

Organization or school _____

Address _____

Area code and phone number _____

BICYCLE FILM REQUEST

	Date requested	
	First	Alternate
Bicycling on the Safe Side		
Bike Talk		
Bikes are Beautiful		
Just Like a Car		

SUGGESTIONS FOR FILM USE

If each person follows these suggestions it will help to provide better service for all requests.

- Request films at least four weeks in advance of planned show date.
- Do not pass films on to others.
- Return films on our reels and in the original container unless damaged in shipping.
- Fill out the report slip and return with the film immediately after showing.
- If there is damage to the film please be sure to note this on the report slip. If a break or other damage occurs, temporarily splice them with masking tape. Do not use scotch tape.
- If films become lost in shipping, notification should be made to the State Department of Education immediately.
- Order only those films you plan to use. Schedule visual aids with a purpose!

8 & 9 year olds' quiz Score _____

THE TRAFFIC SYSTEM

Name _____ Grade _____ Age _____

School, club or group _____

Circle the best answer.

T F 1. A good bicycle driver obeys the rules of the road.

T F 2. The signal for a left turn should be held out until the turn is completed.

T F 3. A bicycle must have a tail reflector if it is to be driven at night.

T F 4. At intersections where traffic is heavy, a bicycle driver should dismount and walk the bicycle as a pedestrian.

T F 5. Bicycle drivers always have the right-of-way over pedestrians.

T F 6. An eight sided sign means school zone.

T F 7. A red and white triangle sign means No U Turn.

T F 8. A flashing red light means stop.

T F 9. Bicycles should be driven in single file on busy streets.

T F 10. The law says that two people can ride a bicycle with one seat.

10 and 11 year olds' quiz Score _____

THE TRAFFIC SYSTEM

Name _____ Grade _____ Age _____

School, club or group _____

Circle the best answer.

T F 1. You should never pass a moving car on the left.

T F 2. The law requires only a good headlight when driving a bicycle at night.

T F 3. The signal for a left turn should be held until the turn is completed.

T F 4. In crosswalks, pedestrians have the right-of-way over bicycle drivers.

T F 5. Hand signals are not required for bicycle drivers under 16 years of age.

Select the best answer to complete the statement.

____ 6. It is legal in Kansas to make a right turn on red after
a. stopping and checking traffic.
b. slowing down to check traffic.
c. when no one is watching.
d. none of these.

____ 7. You should drive your bicycle in the same direction as automobile traffic
a. only when signs indicate.
b. at all times.
c. at no time.
d. none of these.

____ 8. A green colored sign with a bicycle picture means
a. bicycle repair.
b. bicycle rest area.
c. bicycle route.

____ 9. An eight sided sign means
a. yield.
b. railroad crossing.
c. stop.
d. none of these.

____ 10. A flashing red light at an intersection means
a. wait for green.
b. the same as a stop sign.
c. slow down and proceed with caution.
d. none of these.

Unit III

The Driver

4-H Bicycle Education
A New Dimension in 4-H Program for 8-11 year olds

Three Teaching Units by
William H. Borst
Northeast Area Extension
Specialist, 4-H and Youth

The student will demonstrate skills necessary to safely negotiate community traffic systems.

LESSON PLAN

I. Review.

A. Ask students to talk about who within their families drives bicycles and for what purposes: fun, physical fitness, save fuel, go to school, etc.

B. List four of the colors used on road signs.

C. Name some of the shapes used for road signs.

D. Give the bicycle driver's signal for a left turn.

E. Are there bicycle lanes in our town? How are they marked?

F. Review highlights of the film.

II. Drivers' Skill Range.

A. Discuss with students some of the hazards that require defensive driving skills.

1. Road hazards: stones, oil, gravel, pot-holes, storm sewers, etc., that may upset the bicycle.

2. Motorists: making right turn in front of bicycle driver, opening a left hand door of a parked car, crowding bicycle to curb, failing to yield, parking or driving in a bicycle lane, and more.

3. Walkers: stepping off curbs or between parked cars, chasing balls into street, now knowing a bicycle is coming up from behind.

4. Animals: dogs that chase bicycles.

RESOURCES NEEDED

- Use visuals from Unit I and Unit II

B. Range Layout.

1. Ask assistants to help lay out these courses on a hard surface such as a playground, parking lot, or a street that has been preempted by community officials. Measure and mark with yellow chalk or spray paint where each cone or marker should be placed. To help the young drivers, you may wish to draw yellow chalk lines between markers as indicated in the range layout charts.

2. Ranges The range phase is a necessary part of the bicycle education program. Each youngster should have the opportunity to receive both instruction and evaluation on these ranges.

   a. Procedures.

      - Score sheets should be reviewed with students.
      - Scoring, when used, should be explained.
      - Students may be used to monitor exercises when not testing for score.

   b. Exercises.

      - Balance at slow speed: a variation can be to set cones closer together than the specified distance. Teach the "head up" concept.
      - Stopping ability: a variation is to introduce water to the skid area.
      - Maneuvering: teach body lean rather than wheel movement.
      - Figure 8 control exercise: figure 8 drill is most important in teaching space cushion and scanning concepts.
      - Figure 8 signal and turn.
      - Reaction time.

- Five range charts
- 103 6" or 7" traffic cones, or paper or plastic milk cartons partially filled with sand
- 100' tape measure
- Yellow chalk
- Range score sheets
- Bicycles for loan
- Two stop watches

III. Range Demonstrations.

A. Each student should use their own bicycle if possible. A few bicycles of various sizes and types may be brought for loan to help those unable to bring their own.

B. If a student fails to properly negotiate a range, they should be encouraged to try several times in order to be successful. If they are unable to complete a range, they and their parents should be advised that they need practice in safe areas before entering the traffic system.

IV. Quiz.

Students will reflect information presented to them in either the 8 and 9 year old or 10 and 11 year old quiz to determine if proper information has been transmitted to them. All will respond correctly to at least 80 percent of the questions.

- 8 and 9 year old or 10 and 11 year old quiz cards

TEACHERS KEY TO QUIZ

8 and 9 year old		10 and 11 year old	
1. T	6. F	1. F	6. b
2. F	7. F	2. F	7. d
3. T	8. T	3. T	8. c
4. T	9. T	4. T	9. b
5. T	10. F	5. F	10. b

KSU KANSAS STATE UNIVERSITY
COOPERATIVE EXTENSION SERVICE
MANHATTAN, KANSAS

All educational programs and materials are available without discrimination on the basis of race, color, national origin, sex, or handicap.

BICYCLE RANGE SCORE SHEET

Name _____

Group/Class _____

KEY	
P:	pass
F:	fail
V:	value
SS:	student score
PS:	passing score

Balance at Slow Speed (Circle or fill in appropriate score)	V	SS	PS
P F 1. Eyes focused more than 20 feet in front of bicycle during entire exercise.	2	____	
P F 2. Bicycle or driver does not touch cones.	2	____	
P F 3. Neither foot touches ground.	2	____	
P F 4. Pedals rotated only one revolution.	2	____	
P F 5. Drive took at least 20 seconds.	2	____	
Total	10	____	8

Stopping Ability			
P F 1. Gave correct signal.	2	____	
P F 2. Kept feet on pedals	2	____	
P F 3. Stopped at whistle signal or sign.	2	____	
P F 4. Maintained balance and control.	2	____	
P F 5. Continuous pedaling prior to braking.	2	____	
Total	10	____	8

Maneuvering			
P F 1. Foot does not touch ground.	2	____	
P F 2. Bicycle or driver does not touch cones.	2	____	
P F 3. No stopping during exercise.	2	____	
P F 4. Kept feet on pedals.	2	____	
P F 5. Does not skip a space.	2	____	
Total	10	____	8

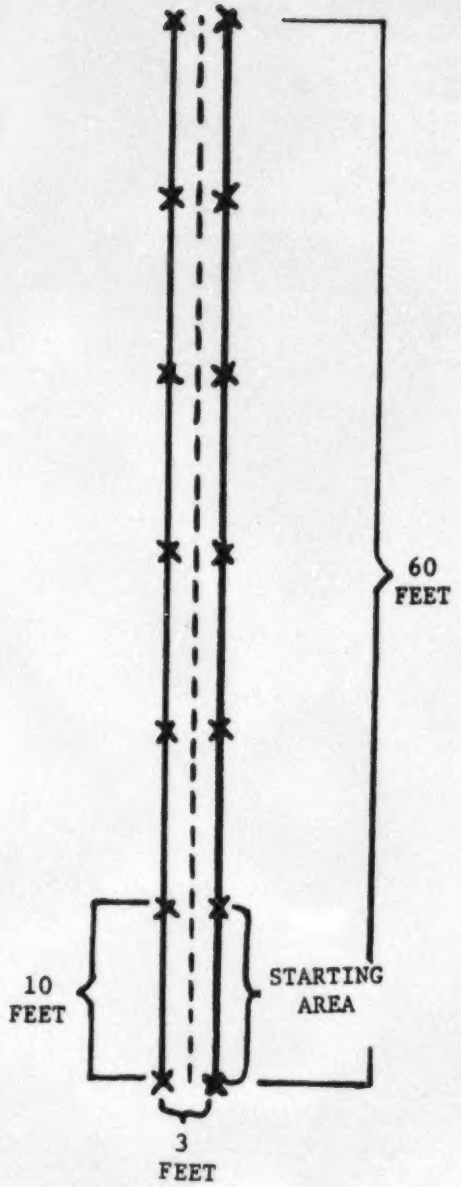
Figure 8 (control exercise)			
P F 1. Did not touch cones.	2	____	
P F 2. Continuous pedaling during exercise.	2	____	
P F 3. Kept feet on pedals.	2	____	
P F 4. Feet did not touch riding surface.	2	____	
P F 5. Kept proper space cushion.	2	____	
Total	10	____	8

Figure 8 (signal and turn exercise)			
P F 1. Gave correct right hand signal.	2	____	
P F 2. Gave correct left hand signal.	2	____	
P F 3. Gave correct stop signal.	2	____	
P F 4. Kept feet on pedals.	2	____	
P F 5. Did not touch cones.	2	____	
Total	10	____	8

Reaction Time			
P F 1. Continuous pedaling during exercise.	2	____	
P F 2. No cones touched.	2	____	
P F 3. Keeps feet on pedals.	2	____	
P F 4. Stops within reaction lane.	2	____	
P F 5. Makes correct decision.	2	____	
Total	10	____	8

Possible Score . 60; Passing Score . 48; My Score . . . ____

BALANCE AT SLOW SPEED



Scale: 1 inch = 10 feet

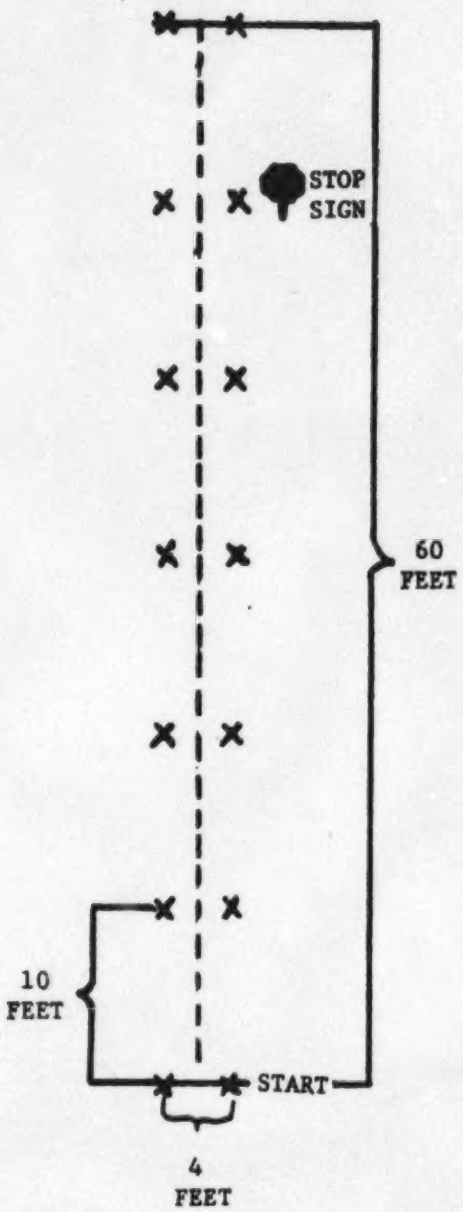
Purpose: To test balance and control within a small area.

Objective: The student will demonstrate his ability to balance and control his bicycle within a three-foot lane.

Procedure: With one complete revolution of the pedals in the starting area, the student is to drive and maneuver his bicycle through the three-foot lane for the entire fifty-foot exercise. Task should not be completed in less than 20 seconds.

Equipment needed:
14 7-inch cones
1 tape measure
1 stop watch with sweep hand

STOPPING ABILITY



Scale: 1 inch = 10 feet

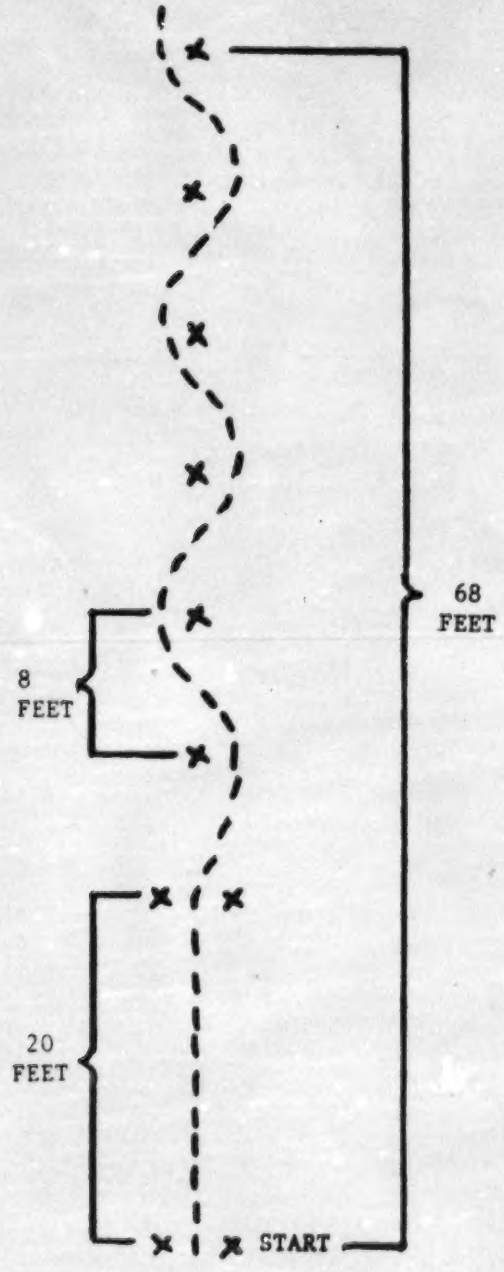
Purpose: To test the bicycle driver's ability to stop in an emergency.

Objective: The student will demonstrate his ability to stop upon hearing a designated signal or at a given stop sign.

Procedure: The bicycle driver will pedal continuously within the lane and will stop at any given cone at a whistle blow. If the driver hears no whistle, he will stop at the stop sign.

Equipment needed:
14 7-inch cones
1 stop sign with base
1 tape measure

MANEUVERING



Scale: 1 inch = 10 feet

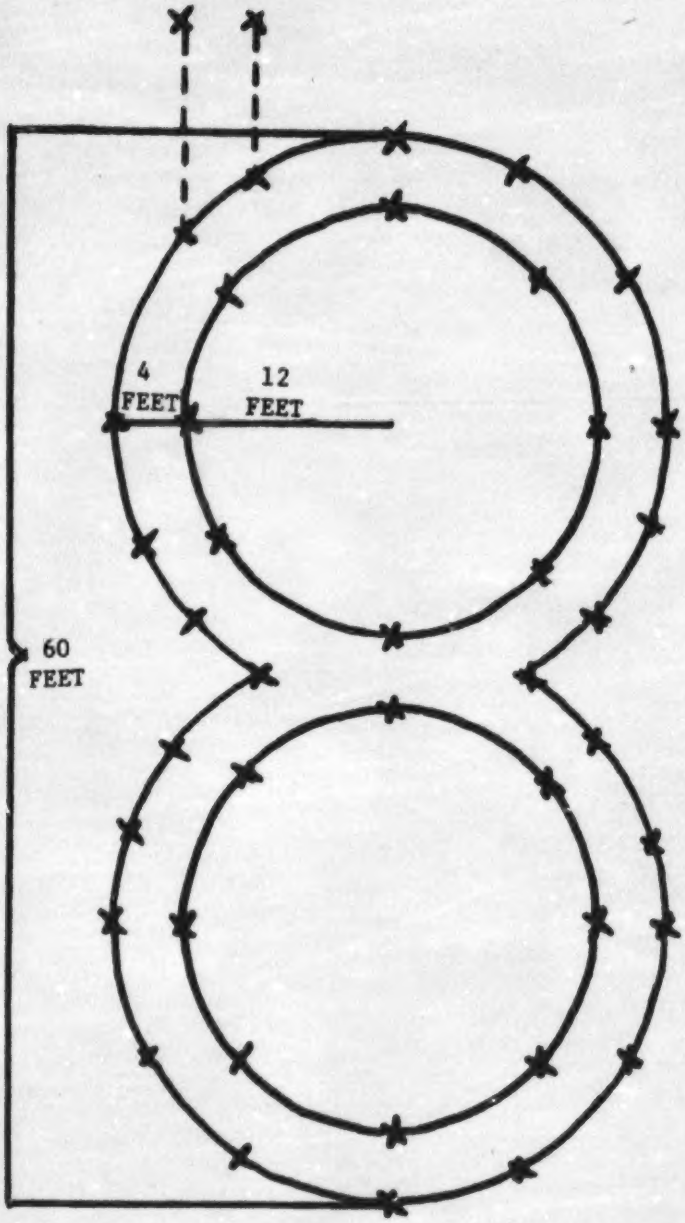
Purpose: To test the bicycle driver's ability to maneuver his bicycle around several cones.

Objective: The student will demonstrate his ability to drive his bicycle in and out of the cones without touching the cones with his bicycle or his body.

Procedure: The student will pedal continuously from start for 20 continuous feet and maneuver between the cones without losing balance and without hitting cones.

Equipment needed:
10 7-inch cones
1 tape measure

FIGURE 8 TRAFFIC PATTERN



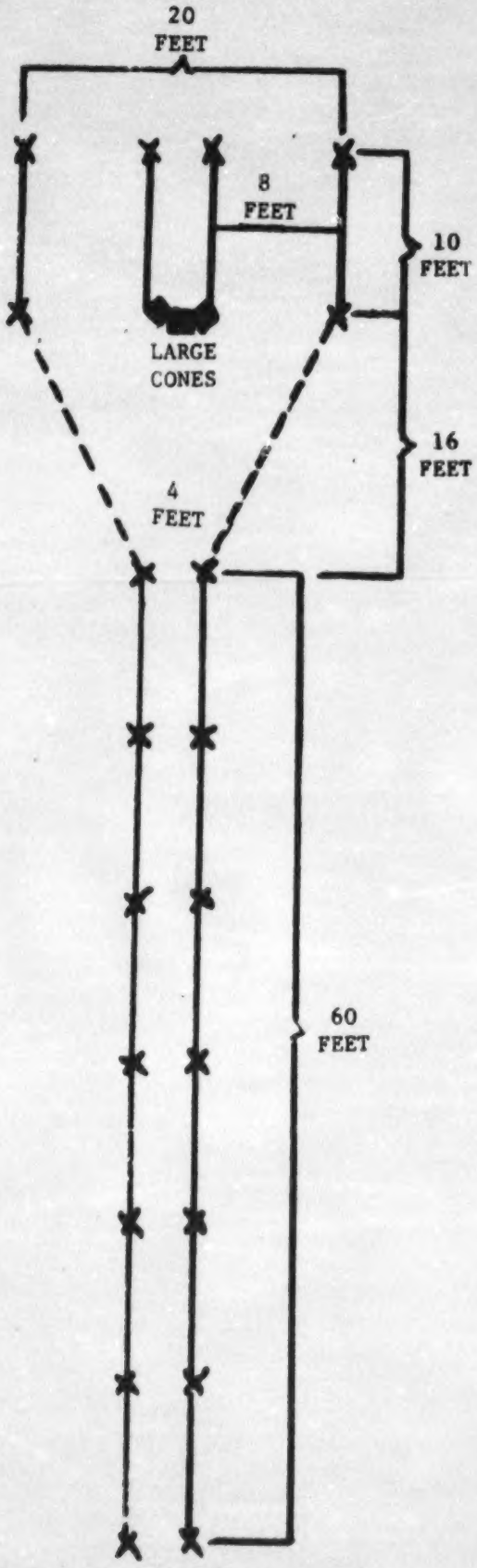
Scale: 1 inch = 10 feet

Purpose: To test the bicycle driver's ability in a traffic situation.

Objective: The student will demonstrate his ability to maneuver, balance, and control his bicycle driving so that he can interact with other bicycle drivers safely.

Procedure: Students may either be placed on the figure eight at strategic places, or may drive on at specified times. From two to ten drivers may interact with each other at one time. Spacing should be from 10-15 feet apart depending upon number of drivers involved.

Equipment needed:
42 7-inch cones (minimum)
More cones could easily be used.
100 ft. tape measure



REACTION TIME

Scale: 1 inch = 10 feet

Purpose: To test the bicycle driver's reaction time.

Objective: The driver will demonstrate his ability to react in a safe manner to various simulated conditions and situations.

Procedure:

The student will stop on command by:

1. whistle
2. object
3. hand direction

The student will make an emergency reaction by:

1. hand direction either left or right
2. object thrown in driver's path

The student will make an emergency stop by:

1. whistle
2. object in driver's way.

The student will stop after reaction to the emergency recovery lane.

Equipment needed:

3 24-inch cones
20 7-inch cones

For 8 and 9 year olds Score _____

THE DRIVER

Name _____ Grade _____ Age _____

Club, school or group _____

Circle the best answer.

T F 1. Having his "head up" lets the bicycle driver see problems before he gets there.

T F 2. Parked car drivers always look for bicycles before opening their doors.

T F 3. Bicycle drivers should warn walking people before passing from behind.

T F 4. Dogs that chase bicycles are a problem.

T F 5. Bicycle drivers should be able to skid their tires on dry pavement when making a stop.

T F 6. The right arm is used to signal a right turn.

T F 7. "Space cushion" is an air filled bag.

T F 8. Both hands should remain on the handlebars except when the driver is signalling.

T F 9. Turning the head and eyes in traffic is called "scanning."

T F 10. It is safe to hitch a ride with a moving vehicle.

For 10 and 11 year olds Score _____

THE DRIVER

Name _____ Grade _____ Age _____

Club, school or group _____

Circle the best answer.

T F 1. Bicycle drivers should keep their eyes straight ahead when operating on a busy street.

T F 2. Balance is not important if the bicycle is moving fast enough.

T F 3. Signals for turning, slowing or stopping should be given well before making the maneuver.

T F 4. Drivers turn bicycles more by leaning than by turning the front wheel.

T F 5. Safe bicycle driving depends more on skill than thinking.

Select the best answer to complete the statement.

____ 6. Driving a bicycle safely requires the driver to
- a. look straight ahead at the road.
- b. turn head and eyes constantly.
- c. use mirrors.
- d. none of these.

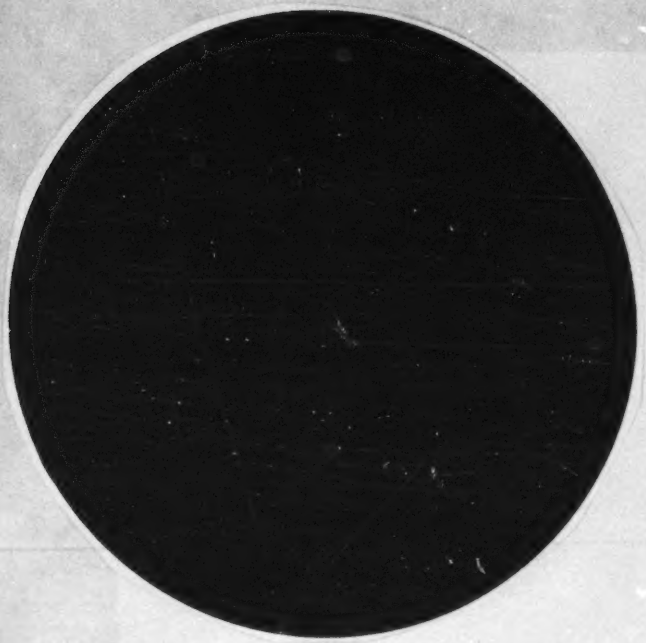
____ 7. When you approach a corner to make a turn, you should
- a. signal.
- b. look behind you.
- c. stop first.
- d. both a and b.

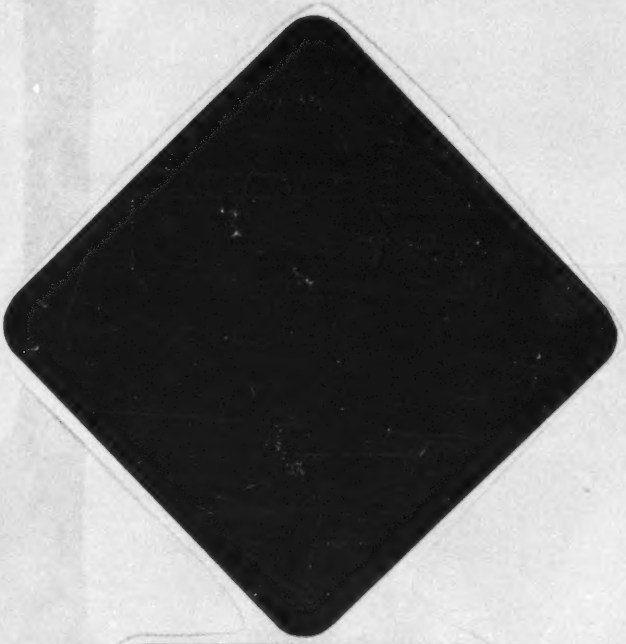
____ 8. When bicycle drivers come to a stop sign, they should
- a. slow down and check traffic.
- b. make sure there are no police nearby.
- c. come to a complete stop.
- d. stop only if there is traffic.

____ 9. If a parked car's door is suddenly opened in front of a bicycle
- a. swerve left to avoid the door.
- b. stop, then go if there is no following traffic.
- c. yell at the people in the car.
- d. none of these.

____ 10. A good bicycle driver can steer the bicycle with one hand when
- a. carrying packages.
- b. signalling.
- c. keeping one hand warm.
- d. all of these.

Can You Read These Signs?

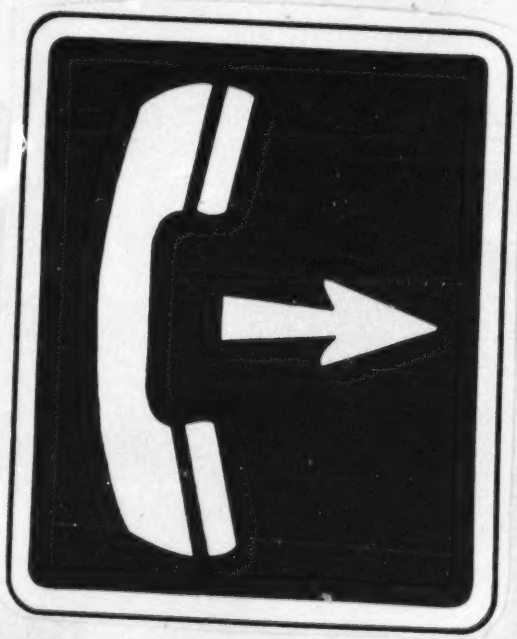




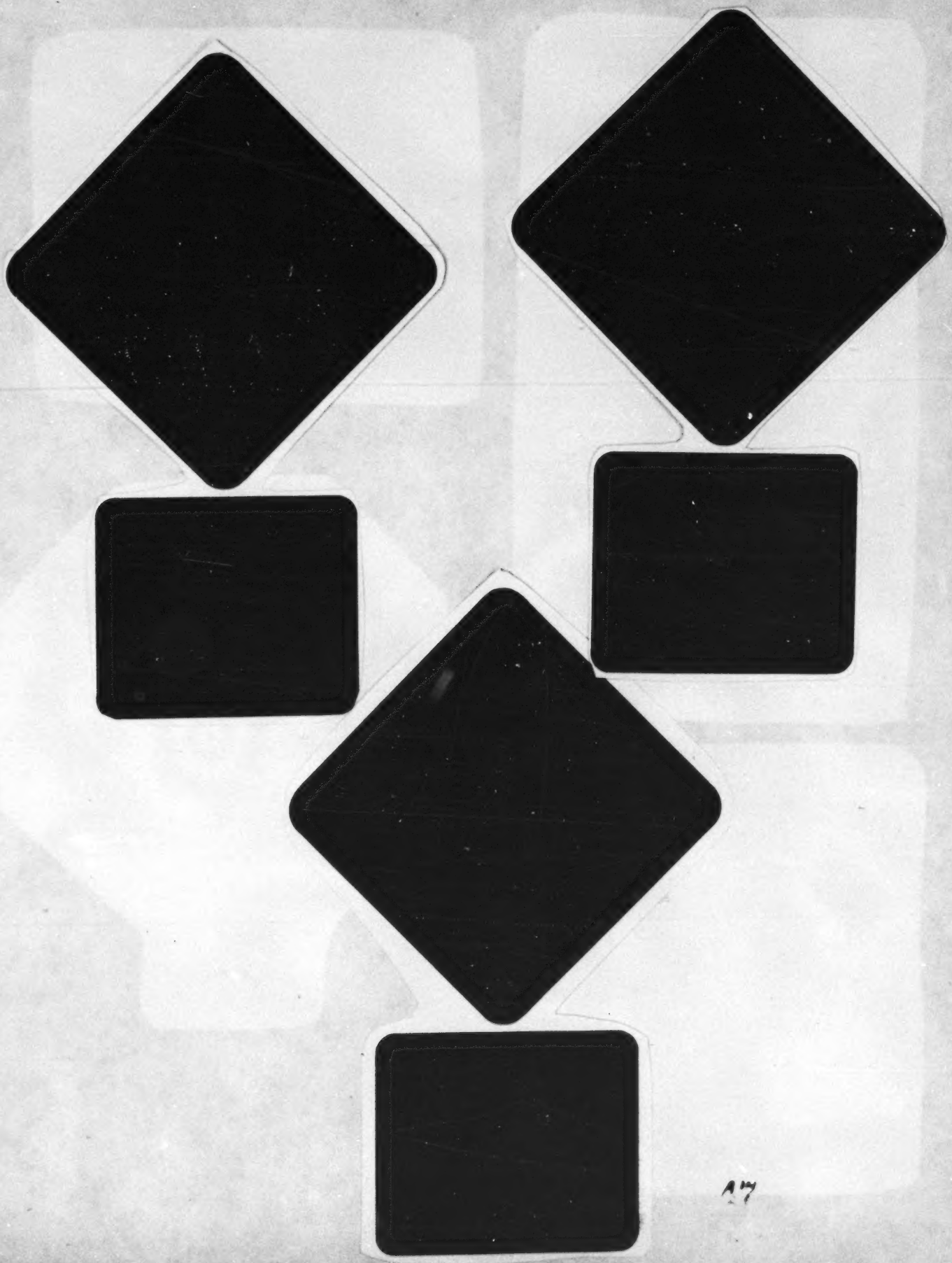
NO U
TURN

BIKE ROUTE

YIELD



Can You Read These Signs?



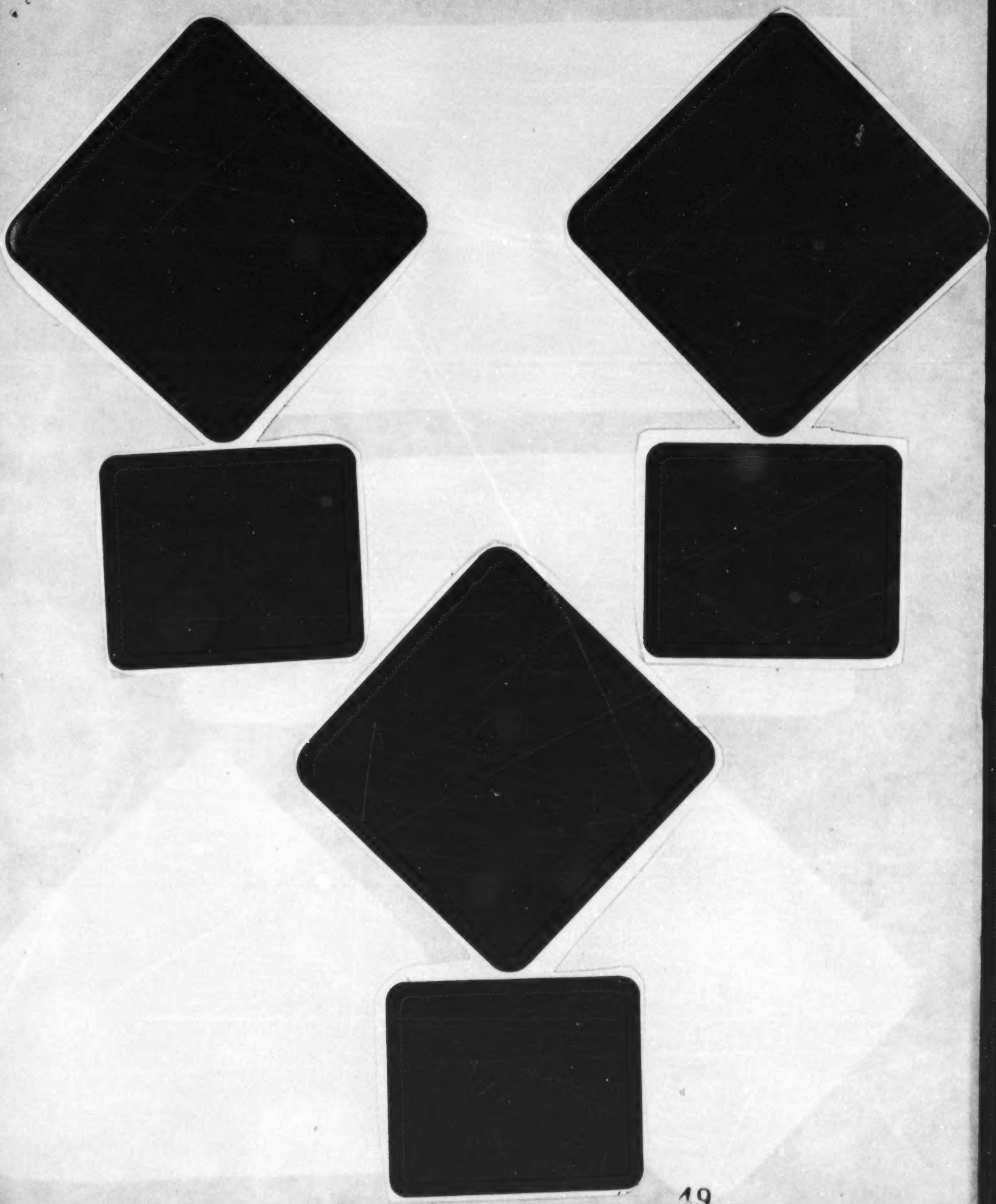
WRONG
WAY

NO LEFT
TURN

STOP
4-WAY

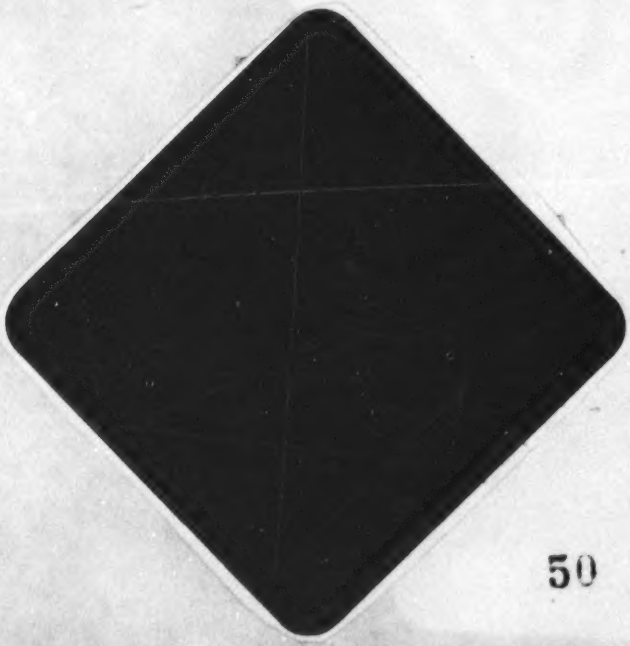
DO NOT
ENTER

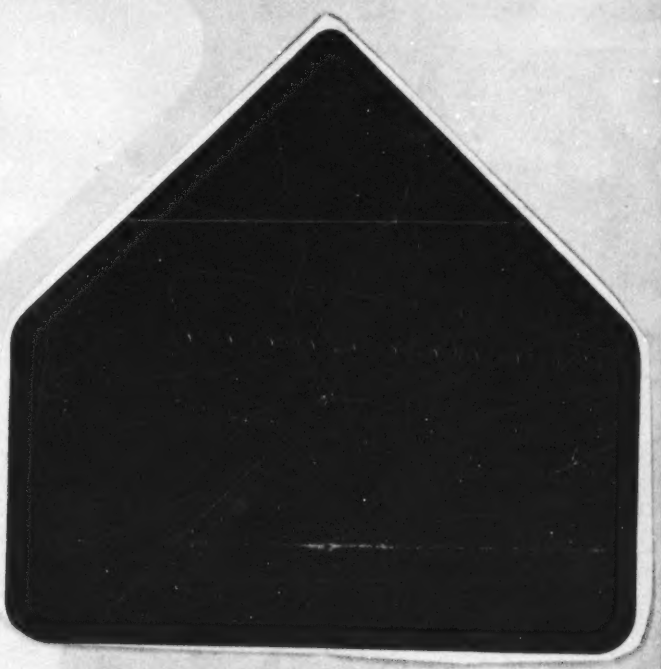
Can You Read These Signs?



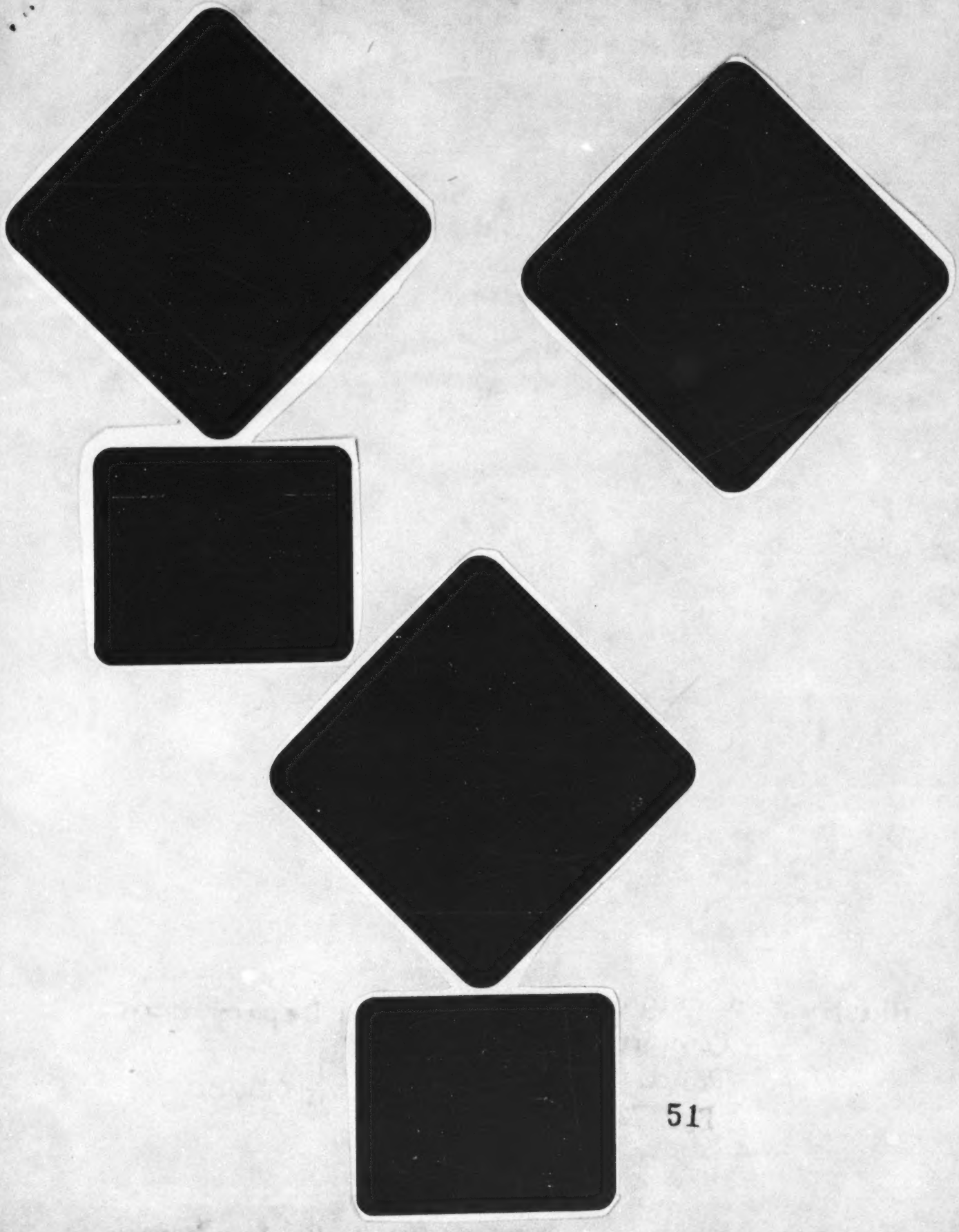
66
6th Street
TO
WEST
36
55
Jacksonville
Chicago

STARVED ROCK
STATE PARK





Can You Read These Signs?



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Rand McNally + Company
Box 7600 / Chicago, Illinois 60680

Publishers of the Rand McNally Reading Program

Welcome to SAFE CYCLING!

SAFETY DEPARTMENT
KANSAS DEPARTMENT OF TRANSPORTATION
10TH FLOOR
STATE OFFICE BUILDING
TOPEKA, KANSAS 66612

This brochure is designed for you by the Safety Department of the Kansas Department of Transportation so that you may enjoy SAFE bicycling no matter what your age or your cycling experience may be.

Whether you are a "weekend recreation biker" or use a bike as your only means of transportation; whether you are a school child who rides a bike to school or a parent of a child who wants to learn how to ride a bike, it is extremely important that you know and observe the bicycle safety rules and the state laws concerning bicycles contained in this brochure.

No matter what your age, if you are just learning how to ride, learn from the very start the SAFE and correct way to handle your bike.

Traffic laws, highway signs, and traffic control signals apply to bicycles as well as automobiles. It is therefore extremely important for a child to begin his traffic safety education when he gets his first "set of wheels", for the child biker of today will become the teenage car driver of tomorrow.

This brochure also tells you the proper way to care for your bike so that it will operate at its best and safest. And it tells you the correct way to select a bike that fits properly.

We encourage the safe use of bicycles because it is not only a fun way to keep your body fit, but cycling may very well be an answer to our air pollution, noise pollution and fuel consumption problems.

In coming years you will be seeing more and more people on bicycles to add to the 75 to 80 million bikers of today. It is our hope that the current nationwide movements for designating bike ways and bike paths will continue to spread so as to encourage safe cycling and ecology concern.

So welcome to the world of SAFE CYCLING and have many years of good health and enjoyment ahead of you!

Learning How to Ride

For those who are learning to ride, for the first time, here are some quick pointers, arrived at after much experience. Select a quiet, traffic–free area like a parking lot or school yard. Lower the saddle until the rider can easily touch the ground. This provides the rider the assurance that he can recover his balance and prevent a fall. After the rider has learned to balance, the saddle can be raised. Have a friend help by holding the back of the saddle and running behind your bicycle, out of sight. Look straight ahead, pedal hard to main–tain forward motion and balance. Try not to think about falling. Your friend will keep the bicycle upright. Ride in a straight line at first. Gradually you will need less help. Ask your friend to stop holding the bicycle without telling you when he is doing it. Remember: keep pedaling, look straight ahead, and keep your helper out of sight.

SAFE CYCLISTS WEAR WHITE AT NIGHT OR SOMETHING REALLY BRIGHT !

CHECK YOUR BIKE FOR SAFE OPERATION

EQUIPMENT

Kansas law requires that every bike shall have:

A front head lamp that exhibits a white light visible from a distance of 500 feet to be used if the bicycle is operated in the nighttime.

A rear red reflector which is visible from a distance of 100 to 600 feet. In addition to the reflector, a red light may be used that is visible from a distance of 500 feet.

Reflectorized pedals which are visible front and rear from a distance of 200 feet.

A brake which will enable the operator to make the braked wheels skid on dry, level, clean pavement.

Optional Equipment that adds to your safety that you may want to purchase is a rear view mirror, turn signal, red taillight, chain guard, reflective tape for night riding, and battery operated 2 way lights that strap on your leg also for night riding. Baskets or carriers are also advisable if you frequently have items to carry.

For added safety it is advisable to equip your bike with a bell or horn that can be heard at a distance of 100 feet. Bicyclist are not as easily seen by motorists therefore a good sounding device is a must for warning and making sure you are seen.

HAVE YOUR BICYCLE INSPECTED TWICE A YEAR BY A COMPETENT PERSON

SELECTING A BIKE

The kind of bike you buy should be determined by considering the following factors. . .

The purpose for which the bike will be used
The price you wish to pay
Type of usage it will get (rough, medium or light)
And most importantly, your concern for Safety.

Regardless of the type or model you choose, make sure it fits properly. A bike which is too large or too small is unsafe to ride.
If you buy a bicycle which is not assembled, make sure you know how to put it together before you take it home. Multi—speed gears can be tricky and unsafe if not assembled correctly. If you have any doubt ask the dealer to do the job, or tell you where it can be done.

The following chart will show you the proper frame and wheel size to correspond with your particular leg length. The leg length is determined by measuring the distance from the crotch to the floor (when wearing flat heels).

WHEEL SIZE	AGE	FRAME SIZE	LEG LENGTH
12 inch	2-4		inches
16	3-5		
20			22 1/2
24			26-28
26		17 inch	28-29
		19	30-31
		21	33
		23	34
27 inch		19	31 1/2
		21	32 1/2
		22	33 1/2
		23	34 1/2
		24	35 1/2
		25	36 1/2

Also, seat height is important for a safe bike. You can tell that the seat is at it s proper height, when your heel can just rest on the pedal in its down position when you are sitting on the seat.

"BIKER'S DOZEN"

Kansas Bicycle Safety Code

1. Have a light on the front and light or reflector on rear of your bicycle and reflectorized pedals as required by Kansas law. Always turn light on at dusk or when riding through rain, snow or fog.
2. Keep to the right and ride in a straight line, never more than two (2) abreast as required by Kansas law.
3. Observe all stop signs, traffic signs, and signals the same as required of motor vehicles by Kansas law.
4. Give hand signals at any location when changing the direction of the bicycle and always dismount at the curb or far right side, as required by Kansas law.
5. Always give pedestrians the right of way. Never ride on sidewalks in business districts. Avoid using sidewalks, otherwise use extra care.
6. Never carry more riders than what the bicycle is designed for and never carry items that obstruct vision or prevent proper control of the bicycle.
7. Never attach yourself or the bicycle to any moving vehicle or attempt fancy or trick riding or any sort of game playing on any street. Never take both hands off the handlebars at the same time.
8. All bicycle riders must stop before coming out of private driveways, alleys, or filling stations the same as required of motor vehicles by Kansas law.
9. Be sure your brakes are operating efficiently and that your bicycle is in perfect running condition, by frequently checking all parts.
10. Never ride upon anything other than the permanently attached seat the bicycle was designed for, as required by Kansas law.
11. Always ride carefully and be alert.
12. Never weave in and out of traffic or swerve from side to side. Never make a sudden turn or U—turn without carefully looking first.

PARENT'S RESPONSIBILITY

When planning to purchase a bicycle, parents should be aware of the responsibilities which they must assume. These range all the way from selection of a proper model to knowledge and enforcement of traffic laws.

First of all, they should ask themselves the following questions:

1. *Is the child old enough. . .*
   To understand and obey traffic laws?
   To learn and obey bicycle safety rules?
   To ride without getting hurt?
2. *Is the neighborhood safe for children on bicycles?*
3. *If the area is not suitable for bikes, are there places nearby where children may ride safely?*
4. *Do we have the patience to teach our children traffic laws and safety rules?*
5. *Are we willing to help them while they are learning to ride, and do we have time to show them how to take care of their bikes?*

If some of the answers are "No", it might be best to reconsider. If "Yes" and you decide to buy a bike, be sure to get one the correct size for your child. (refer to chart and ask your dealer).

TRAFFIC LAWS

Traffic laws make it possible to travel with reasonable speed and safety. If everyone understood and obeyed them there would be fewer traffic jams and accidents. Kansas law states that traffic laws apply to persons riding on bicycles and they shall be subject to the provisions of these laws.

We have mentioned the equipment that is required by law (See "Equipment" section) and the "Kansas Bicycle Safety Code" includes Kansas laws which specifically apply to bicycles (See "Code" section). This section shall review traffic laws that every cyclist must observe.

INTERSECTIONS:

1. If uncontrolled (no signs or signals) slow down look to the left and right for oncoming vehicles, be prepared to stop. -- always be ready for someone who doesn't see you!
2. If there is a stop signal you must stop completely on *Red* or flashing *Red* then proceed only on *Green* when clear.
3. If there is a stop sign check if it is a 2—way or 4—way stop. Stop completely and proceed only when it is your turn.
   Remember: The vehicle on the *right always* has the right—of—way and if it doesn't belong to you, yield. Even when you have the right—of—way be cautious and ready for the driver who doesn't understand. Let him go first or wait to see what he is going to do. If there is a flashing yellow light, slow and use extra caution.
4. Bicyclists must obey all traffic signs at intersections whether "Stop", "Yield", "Merge", "one Way" etc.

PEDESTRIANS:

1. Bicyclists must yield to all pedestrians.
2. Slow down or stop for persons who are walking across the street at an intersection or between the white lines of a cross walk.
3. When you wish to turn you must give the right—of—way to the pedestrian (let him go first)
4. When you stop yield to pedestrians before proceeding.
5. When a traffic light turns green wait for pedestrians already in the crosswalk.
6. Bicyclists are required to come to a complete stop for blind persons who have a white cane or are being guided by a dog.

LANES AND PASSING:

Streets and highways are divided into different lanes by white lines. If there is only one lane for traffic in each direction, the road has a broken yellow center line. When there is more than one lane, the centerline is a double yellow stripe and the different lanes are seperated by a broken white line.

ON 2 WAY, 2 LANE STREET OR HIGHWAY:

1. Always ride on the right close to the curb. Ride in the same direction as other traffic.
2. Never cross center line to pass unless you first make certain you have the time and space to do so safely.
3. Never pass when there is a yellow stripe on your side of the center line.
4. Never pass at intersections and railroad crossings.

MULTI—LANE STREETS AND HIGHWAYS

1. You must ride in right hand lane except to pass or turn left.
2. Never weave back & forth between lanes and when you must change lanes signal, use caution, be sure you are seen.

ONE WAY STREETS:

You *must* ride in the direction as posted by the sign, *never* against traffic.

EXPRESSWAYS:

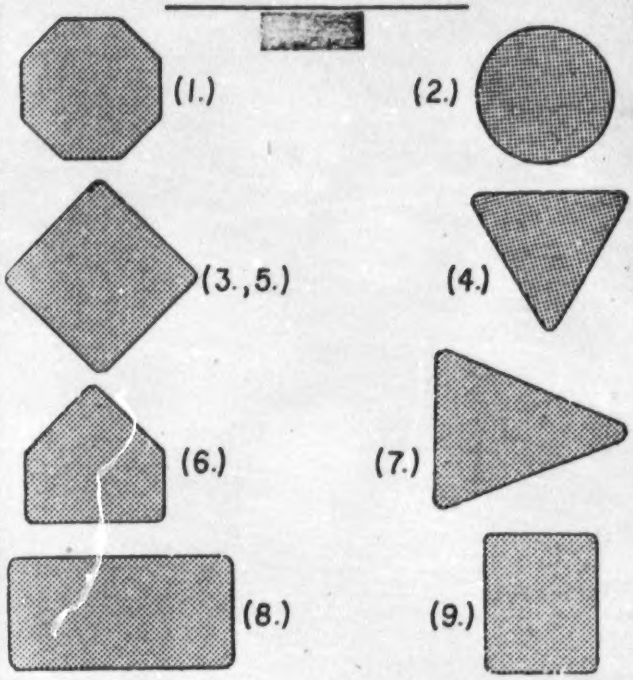
Bicycles are *NEVER* allowed on these high speed highways. Signs at entrance ramps will tell you this.

OTHER LAWS

1. Every town and city has local traffic laws called ordinances. It is important that you know and observe them. If uncertain inquire at your police station.
2. Bicyclists must stop from either direction for stopped school buses.
3. Stop within 50 to 15 feet of railroad crossings if warning is flashing or if gate is down, or if a train is approaching.
4. You must pull over and stop for emergency vehicles with siren and lights on. Be careful and watch for cars also pulling over.
5. You must never ride at a speed faster than that which is reasonable and proper for road conditions and safety.

229-P

Sign Language



As a bicycle rider, you must obey all traffic signs and signals just as automobile drivers are required by law to do.

You have probably already noticed the new highway signs without words that are appearing on the state's highways. These eventually will be used all over the country and the world. These new signs rely on *symbols* instead of words. Sign shape and color also is important in conveying the purpose of the sign. In this way it is possible for you to more readily recognize what the sign is telling you to do.

REMEMBER:

1. RED OCTAGON: Always means STOP
2. ROUND: Always means RAILROAD CROSSING
3. YELLOW DIAMOND: Warns of existing or possible hazards ahead
4. EQUILATERAL TRIANGLE: Always means YIELD
5. ORANGE DIAMOND: Warns of road work or construction ahead
6. PENTAGON: Warns of school and school crossings ahead.
7. PENNANT: Always at beginning of *No Passing Zones*
8. HORIZONTAL RECTANGLE: Guide signs
9. VERTICAL RECTANGLE OR SQUARE WITH RED CIRCLE AND BAR:
   Regulatory signs meaning "No" such as "No U—Turn," "No Trucks", etc.

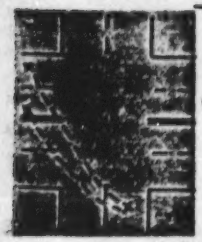
Remember that pavement markings are "signs" that tell you what to do, and they too must be obeyed.

1. Many intersections have a broad white line ahead of crosswalks. You must stop BEHIND this line.

2. Left Turn only lanes and often Right Turn only lanes are marked on the pavement. You must obey them and turn only in the direction it tells you. *Never* continue going straight in one of these lanes.

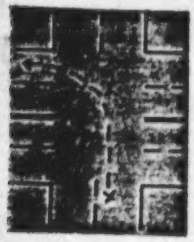
3. Remember lane markings also tell you what you can and cannot do. They are not to be ignored by bicyclists. (See "Traffic Laws—Lanes and Passing" section.)

Making Turns



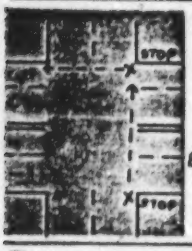
WRONG WAY
8.

LEFT



CORRECT
WAY

RIGHT



BEST WAY
4.

STOP
or
SLOW

There are certain rules which must be followed when you wish to make a turn. This is necessary to avoid accidents and to prevent interference with other traffic.

Always give the proper signal by hand, and by signal lights if your bike has them, at least 100 feet in advance of your turn. The correct hand signals are illustrated to the right. *Learn* them and *use* them!

Things to remember when turning:

1. Plan ahead. Don't wait until you get there before you decide what you are going to do.
2. Never U-turn on hills or curves.
3. Never U-turn on streets where it is not allowed. On streets where permitted, always be sure it is safe *first*.
4. When you want to turn left onto busy streets it is safer to stay in the right lane and walk your bike across one street and then the other. You will then be in the right-hand lane of the street you've entered.
5. Always make right turns close to the curb and always turn into the right-hand lane of the street which you enter.
6. When stopped to make a turn it is a good idea to check BEHIND you as well as ahead and left and right.
7. Always watch for turning motor vehicles.
8. When turning left NEVER cut across the oncoming traffic lane to get to your lane.

How well do you know how to ride?

If you can answer all these questions correctly you are on your way to becoming a safe cyclist. However, merely knowing what the laws are is not good enough. You must know and obey the laws in order to be a safe cyclist.
If you do not know the answers read this brochure again carefully to find them.

True — False:

1. *When it is dark you must have a white headlight visible for 500 feet.* _____
2. *Your bike doesn't need a red rear reflector or taillight for night riding.* _____
3. *You may ride in either direction on a one-way street.* _____
4. *Pedestrians always have the right-of-way.* _____
5. *Bicyclists may ride facing oncoming traffic.* _____
6. *You may ride a bike that has no brakes without breaking the law.* _____
7. *If your bike is too big or too small you are risking your safety.* _____
8. *Bicycles are not allowed on interstate highways or express-ways.* _____
9. *Bicycle riders do not need to signal before turning.* _____
10. *Bicycle riders are required by law to obey traffic signs and signals.* _____

Choose the best answer:

1. *A round yellow sign means:*
   a. Stop b. Railroad Crossing c. Pedestrians
2. *A flashing red light means:*
   a. Same as a Stop Sign b. Caution c. No left turn
3. *When there are no stop signs or signals, the right-of-way belongs to:*
   a. driver on the left
   b. driver on the right
   c. whoever blows horn first
4. *When riding with others you should go no more than:*
   a. 2 abreast b. 4 abreast c. 3 abreast
5. *Two people may ride on one bike:*
   a. Only if there are 2 seats and the bike is designed for 2 people.
   b. Anytime
   c. If traffic is light
6. *Bicyclists should ride:*
   a. between traffic lanes
   b. always on the left
   c. always on the right, close to the curb
7. *A red 8 sided (octagonal) sign means:*
   a. yield
   b. stop
   c. slow
8. *Bicyclists cannot:*
   a. attach bike or hold on to a moving vehicle
   b. make right turns
   c. ride on city streets
9. *A safe biker always:*
   a. rides without a seat (or saddle)
   b. checks his bike often to be sure it works properly
   c. rides at night in dark clothing
10. *When coming out of alleys, driveways, etc. a bicyclist must:*
    a. stop and then go when clear
    b. look both ways, but not stop
    c. just keep on going